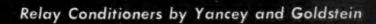
Obertin College Library
MAR 2 2 . 949



The Fundamentals of Pitching by Hal Schumacher







High School Tennis by George L. Seewagen

Medal Champion Medal SUPER Champion

... You'll find a quality Gold Medal tennis net in every price range.

In Gold Medal and Gold Medal Champion, you will find low and medium priced tennis nets designed and constructed to give you full value in longer, troublefree service.

In the Gold Medal Super Champion you will get the finest of all tennis nets—a tennis net which, as one famous tennis coach describes it, "needs no pulling, no stretching, and no fixing; just put it up and it stays."

Side-pockets firmly fastened down each end of the Super Champion hold Net-true braces which (1) prevent shrinkage (2) make mesh hang square and true (3) eliminate gaps at the post and (4) prolong net life

by spreading the tension evenly.

For other Spring sports: Gold Medal quality Baseball protection nets and batting cages; Field Hockey goals; Badminton nets; LaCrosse goals.

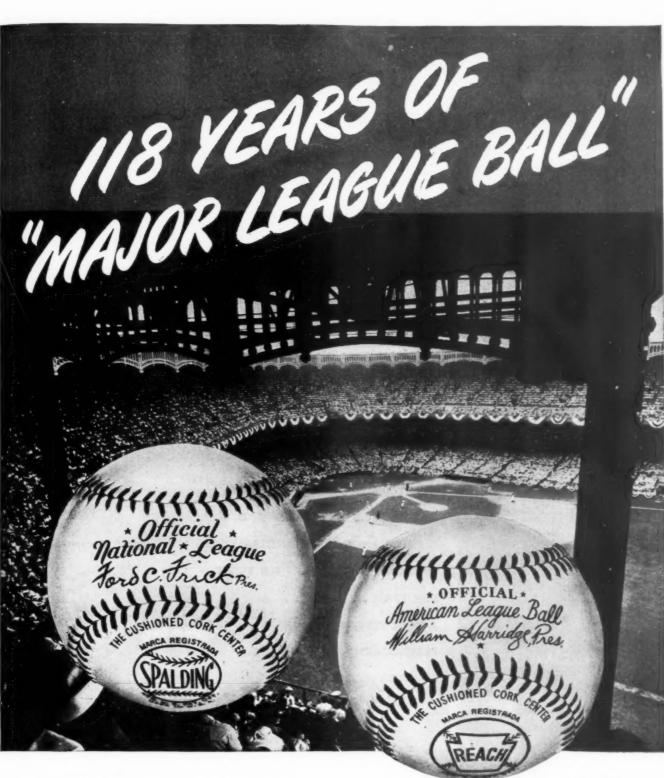
Check your nets now and order Gold Medal from your dealer good and early. That's the way to be sure you'll start your season right!

> Makers of fine nettings for 107 years

THE LINEN THREAD CO., INC.

418 GRAND STREET, PATERSON 1, N. J.

New York 17, N. Y. · Baltimore 3, Md. · Boston 10, Mass. · Chicago 10, Ill. · San Francisco 5, Cal. · Philadelphia 6, Pa. · Glaucester, Mass.



• Think of it! Every hit... every home run... every play made in the Big Leagues is made with one of the "Twins of the Majors."

Together, these famous base balls have piled up 118 years of history-making performance...for the Spalding 71 years in the National League . . . for the Reach 47 years in the American! No other base balls have ever been used. They're as much a part of baseball as baseball is a part of American life.

THE TWINS OF THE MAJORS
BOTH MADE BY

SPALDING



Ask your dealer about **Equipment** for BADMINTON

Rackets R.S.L. Shuttlecocks R.S.L. Timpe Shuttlecocks **Badminton Sets**

TENNIS Rackets by Slazenger's (English) Slazenger's Balls

DECK TENNIS

Complete Sets

QUOITS

Complete Sets Large School Type Sets

SOCCER

English Soccer Shoes English Soccer Balls Shinguards

SHUFFLEBOARD

Complete Sets 4 Pushers and 8 Discs

FIELD HOCKEY

English Hockey Sticks Balls Guards

TABLE TENNIS

Bats, Nets, Balls Complete Sets

FENCING

Foils (French) Gloves Blades

BAT TENNIS

Bats Balls Complete Sets



Write for free copies of rules' booklets for Badminton, Deck Tennis, Shuffleboard, Table Tennis, Bat Tennis; and the address of your nearest dealer carrying Sportcraft

GENERAL & POTTCRAFT COMPANY

215 Fourth Ave., New York, N. Y.

OLAS

Reg. U. S. Pat. Off

VOLUME 18 NUMBER MARCH

IN THIS ISSUE

HERE BELOW (Baseball Gets a Hotfoot)
RELAY CONDITIONERS by Joe Yancey and Cliff Goldstein
PITCHING by Hal Schumacher
DISTANCE RUNNING by Richard Lane Bernstein
BILL HULSE, MILER (Action Pictures)
NEW EQUIPMENT
HIGH SCHOOL TENNIS by George L. Seewagen
FOILED! by William F. Strobel
RUN YOUR OWN CLINIC! by Irwin (King Kong) Klein
HEALTH EXAMINATIONS by C. O. Jackson
MAINTENANCE OF THE FOOTBALL FIELD by George T. Bresnahan 34
OUTDOOR TRACK AND FIELD RECORDS, 1949
BUY EARLY
A RACE EVERY FOUR MINUTES by Cliff Boylan 44
PRESS-COACH RELATIONS by Eugene A. Conklin 54
COACHES' CORNER

Publisher . G. HERBERT McCRACKEN HERMAN L. MASIN Advertising Manager • OWEN REED Art Director . M. J. DUNTON

SCHOLASTIC COACH IS ISSUED MONTHLY TEN TIMES DURING THE ACADEMIC YEAR (SEPTEMBER THROUGH JUNE) BY SCHOLASTIC CORPORATION, M. R. ROBINSON, PRESIDENT, PUBLISHERS OF SCHOLASTIC MAGAZINES FOR HIGH SCHOOL STUDENTS.
ADDRESS ALL EDITORIAL AND ADVERTISING COMMUNICATIONS AND ALL CORRESPONDENCE CONCERNING SUBSCRIPTIONS AND CIRCULATION TO SCHOLASTIC COACH, 7 EAST 12TH STREET,

NEW YORK 3, N. Y.

SUBSCRIPTION FOR THE UNITED STATES, \$2 A YEAR. CANADA, \$2.25. FOREIGN, \$2.50. BACK ISSUES:

CURRENT VOLUME, 25c; PREVIOUS VOLUMES, 50c.

THE ENTIRE CONTENTS OF SCHOLASTIC COACH COPYRIGHTED, 1949, BY SCHOLASTIC CORPORATION.

SCHOLASTIC COACH IS A MEMBER OF THE CONTROLLED CIRCULATION AUDIT, A BUREAU FOR EXAMINING AND AUDITING CIRCULATION FIGURES FOR THE PROTECTION OF ADVERTISERS. CCA STATEMENTS OF SCHOLASTIC COACH CIRCULATION SUPPLIED ON REQUEST. THROUGH THIS SERVICE, SCHOLASTIC COACH ADVERTISERS RECEIVE INCONTROVERTIBLE EVIDENCE OF THE CIRCULATION THEY ARE PAYING FOR. 447





ON THE DIAMOND



FROM COAST TO COAST THIS TAG MEANS NON-RAVELING, LONGER WEARING SPORTING EQUIPMENT.





C. R. DANIELS, INC.

Sporting Goods Division

DANIELS, MD.

we the

to Ga bee do ou 19 cai

Ba

ou

COI

ba sui ba

ba su de ing the on pe

sh

th

fir

Su

ab

cla

co



Baseball gets a hotfoot

AVING never been exposed to the ponderosities of jurisprudence—except for a few scrimmages with our landlord, the dog—we admit that all we know about the law could fit into the hip pocket of a midget. Nevertheless it seems to us that in the now famous l'Affaire Gardella, organized baseball has been caught with its Blackstone down.

Danny Gardella, a half-boy halfoutfielder, jumped the Giants in 1946 to play in the "outlaw" Mexican League. For this heinous crime, baseball's cop, Happy "Ah Love Baseball" Chandler, suspended him for five years.

Two years later, the defrocked outfielder returned to the States and discovered that Happy wasn't kidding. Try as he could, poor Danny couldn't land a job in organized baseball. Being incapable of pursuing any trade other than bashing baseballs for considerable distances, the little man found himself in a bad way. So he filed a \$300,000 law suit against organized baseball for depriving him of his means of earning a livelihood.

A Federal District Court tagged the suit out, but Danny kept right on running—to a U.S. Court of Appeals. What happened is now history.

The Court of Appeals ruled that baseball "possesses characteristics shockingly repugnant to moral principles," and sent the case back to the Federal District Court for trial. Danny boy now looks like a sure-fire winner, but the final inning will probably have to be played in the Supreme Court.

All the jurisprudential rigmarole about "peonage," "monopoly," etc., stems directly from the reserve clause in every player contract. This clause binds a player to the club with which he signed his original contract. It forbids him to play or negotiate with any other club until he has been traded or released.

According to the diamond hier-

archy, this clause is the key to the entire structure of the game. And a perfectly lovely key it has proven. It protects many a promising young benchwarmer from selling himself to another club and getting rich quickly. It also protects him from worrying about his next year's salary since the clause provides that "in default of agreement the player will accept such salary rate as the club may fix, or else will not play baseball otherwise than for the club or an assignee thereof."

Unfortunately, however, the clause does not protect him against a tenday notice tossing him out on his sliding pads.

That, in a capsule, is the Mr. Hyde side of the reserve clause. The Dr. Jekyll side is obvious enough. Imagine what would happen if the reserve clause were abrogated and the players were permitted to sell their services to the highest bidder!

Nothing is clearly black or white in this case. All the pitiful bleating about baseball being a soulless monopoly and Gardella being the ruin of baseball, is claptrap of the purest bray serene. While Gardella has given baseball a hot foot, it is ridiculous to assume that the slight char thus inflicted may prove fatal to the game.

We think that only good will come out of this trial. Baseball's soiled linen will be scrubbed in public and the game will continue in shining rectitude and health.

Remember the Mexican raids in '45 and '46? Out of these abortive incursions came the \$5,000 base-play law, the player pension plan, and the players representative committee. Out of the Gardella suit will probably come a fairer and sounder reserve clause.

BACK in our misspent youth, two thousand light years ago, we doled out many a hard earned half-buck to see Hal Schumacher deliver his sermons from the mound.

Although Hubbell was the "King Carl" of the Giant pitching staff, we sort of went for "Prince Hal." Hubbell made the darn thing look too easy. Blessed with marvelous control, a ghoulish screwball, and a motion that was tremendously free and easy on the draw, "King Carl" was a little too rich for our blood.

"Prince Hal" was more to our taste. Though he possessed his share of basic equipment, pitching was more a blood, sweat, and tear proposition to him, and we loved his ferocious competitive spirit when it came to pitching his way out of jams.

That's why we got such a bang out of meeting him last month and prevailing upon him to write an article for us. Currently the vice president of a thriving bat company, the quondam "Prince" of the Giant pitchers hasn't changed much since he laid his glove to rest in 1946. He still has that fullback body, unjowled fighting jaw, and rocklike fist.

Knowing how busy he is and how most athletes hate to sully clean white paper with the written word, we asked Hal whether he would prefer to dictate his article to us. Much to our surprise, he said no. Having been a crack English student at St. Lawrence U., the idea of writing a piece intrigued him.

We straightforth repaired to the Polo Grounds, where Hal slipped into a Giant uniform and posed for the pictures you see on pages 8-11.

A couple of weeks later Hal blew into town with a ream of notepaper under his arm. That was his article all written out in a tidy hand.

"Some job," he remarked rather wryly, "I never knew how tough it is to visualize this technical stuff and put it on paper. I had to get on my feet and pitch a game in slow motion to figure out exactly what you do in pitching."

We went over the article pitch by (Concluded on page 57)



in equipment counts!

Coaches know that in any game confidence is next in importance to skill, coordination and condition. Players everywhere know the name Wilson... its widespread acceptance... its long established reputation for quality. With Wilson, they're sure they're playing with the best. That assurance and the confidence gained from playing with equipment that handles right—feels right—IS right, add to the players' confidence developed from what they're taught, from practice and from experience. Specify Wilson to give all the material assistance it's possible to obtain in sports equipment.

WILSON SPORTING GOODS CO., CHICAGO (A subsidiary of Wilson & Co., Inc.)

11's Wilson

Keephi

the

on

thi

for

eri

dis

cu

No

ato

try

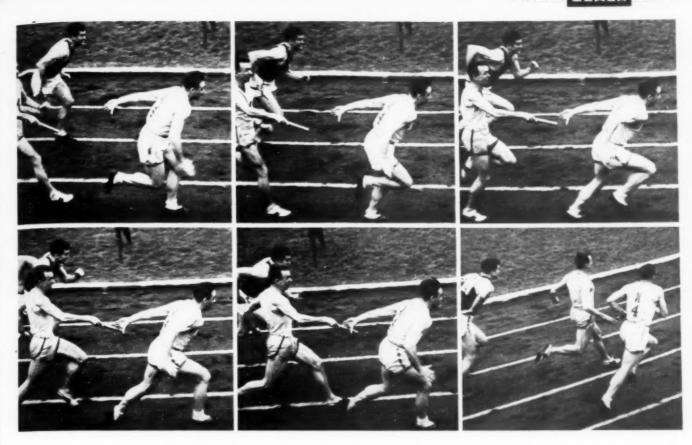
Me

Cli

tio clu

qua

TODAY IN SPORTS EQUIPMENT



Relay Conditioners

TEAM A's anchor man flailed the afternoon air in frustration. Forecasted for the National AAU Sprint Medley Relay crown, his team mates were performing like novices. The starter's gun had caught the leadoff man napping and a fumbling pass had delayed the second man.

The anchor man groaned as the third man ran wide on the turn, fighting out of a pocket. A bobbled exchange would insure a new record for blunders. Sure enough, the anchor man clinched that unenviable record. By the time he retrieved the errant baton, he was hopelessly outdistanced.

Fortunately, these miscues occurred in the last practice session. Not the Nationals. After a half-hour rest and some coaching, Team A atoned for its sins. Two days later, Team A—the N. Y. Pioneer Club entry—won the National AAU Sprint Medley Relay diadem, and thus reaffirmed the wisdom of the Pioneer Club's relay workouts.

Relay workouts are used as conditioners for every member of the club — relay men, individual performers, and field men. The regular quartets are run first, then the im-

Manhattan College's famous inside pass is demonstrated here by its championship half-mile foursome at the 1948 Penn Relays. The baton is passed from the right hand of the incoming runner into the left hand of the receiver. Although this is in direct opposition to standard operating procedure, Coach George Eastment has had unusual success with it in both high school and college.

provised relays of field men and individual performers.

The quartets are handicapped on the basis of their best times. Ten yards are allowed per second of difference in their times. Suppose our best mile relay, Team A, hits 3.20, Team B does 3.23, and Team C runs 3.28. That means Team A's leadoff man will start at scratch, while the first-leg man of Teams B and C will be given handicaps of 30 and 80 yards, respectively.

The same system of handicapping is used for relay races among individual performers and those among field men competing in their respective groups. Top men start at scratch and less polished performers receive handicaps on the 10-yrds-per-second basis. The regular relays are run first, starting with the shortest distance and working up to the longest. Then come the improvised foursomes.

Sprinters and field men vie at 440, 880, and 1200 yard distances. Quarter-milers and half-milers compete in half-mile, 1200 yard, and mile relays. Distance men run 1200 yard, mile, and two-mile relays.

By the time the last group of improvised relay teams have finished their first race, the regular relay teams have been rested enough to repeat. And by the time the regular relay teams finish their second race, the improvised teams are ready to run again. The program runs smoothly.

Every member benefits. Regular quartets sharpen their baton passing, coordination, and mental alertness. Individual performers learn more about pace and kick. Field men pick up speed and alertness. And as one youngster remarked: "Relay running is fun!"

(Continued on page 51)

By JOE YANCEY and CLIFF GOLDSTEIN

BY Hal Schumacher

NEW YORK GIANTS 1931-1946

Pitching

NASMUCH as pitching is as least 60 to 70% of a team's strength, an effective hurling staff is practically an iron-clad guarantee of a successful season.

This is particularly true in high school and college ball. Schoolboy nines rarely play more than one or two games a week, and the presence of just one good pitcher can mean the difference between a fine and a mediocre season. The wise coach, hence, will devote all the time he can to the development of his pitchers.

The tall, loose-limbed boy epitomizes the ideal physical type for the position. But size is not necessarily a prerequisite. This is evidenced by the success of such small men as Tommy Bridges, Harry Brecheen, Vic Lombardi, and many others. None of these men are physical giants, yet all have achieved conspicuous success. Natural ability plus hours of hard practice work can compensate for the lack of stature.

The ability to throw hard is the most important asset a pitcher can have. The curve and change of pace can be readily acquired under competent tutelage. But a good fast ball is an act of god, and there is no substitute for it.

Speed is particularly effective in high school and college ball, and any boy possessing it merits the closest attention of the coach. While the average schoolboy fast baller seldom possesses control this can be acquired through diligent practice, and it will pay the coach to be patient with such boys.

Major league scouts are always on the lookout for pitchers with a good "live" fast ball and the boy so equipped has an excellent opportunity of advancing in pro ball.

Control, the bugaboo of all pitchers, cannot be stressed enough. It is vitally essential and can be acquired only through hours of the most arduous and planned practice.

It is not enough for the pitcher just to throw to the catcher. Each pitch should be made with a definite purpose in mind. This is true whether the pitcher is merely warming up, working batting practice, or actually throwing in a game.

The pitcher should concentrate hard on his control and try to throw the ball to a definite area in the strike zone. The boy should first work on strikes belt-high down the middle, then switch to high strikes, and end up with low strikes.

The finer points of control such as pitching inside or outside, will be acquired gradually with experience. But the first esential is to be able to throw a strike consistently. The catcher can help the pitcher immeasurably by offering his glove as a target.

A word of caution is in order here. The boy should be cautioned not to draw too fine a bead on the target—in other words, to shoot for a dime. If the pocket of the catcher's mitt is considered the exact center of the target, any pitch landing within a periphery of six inches or less could be considered an excellent example of control.

In attempting to put the ball where they want it, too many youngsters make the mistake of easing up and aiming the ball. The result is usually disastrous. The ball may come over, all right, but too often it will be just right for the batter.

True control can be defined as the ability of the pitcher to put the ball close to the desired target with all the natural equipment at his disposal.

Most pitchers prefer to take the catcher's sign while standing on the mound just before the wind-up. The pitcher faces the plate squarely, with the right foot on the rubber and the left foot a few inches back (All the instructions here apply to the right-handed thrower.)

A short wind-up is valuable to produce momentum and throw all the body weight behind the pitch. The wind-up, as you may observe in the accompanying pictures, is a closely coordinated series of movements.

The arms are raised vertically over the head with the back of the glove turned directly toward the hitter, thus concealing the ball from him. As the hands go up, the left foot goes back to provide extra impetus to the delivery, and the weight shifts to the rear. The eyes are focused squarely on the catcher's target, then the pivot begins.

The right foot slides diagonally forward into the hole directly in front of the rubber, and the body, with the right foot as a pivot, turns to the right. The left leg is swung up and around to the right, and the



Ordinary pitching grip.



Grip for palm ball.

in

bo









After taking sign (1), Schumacher takes short step back and starts pumping (2-3); he then pivots to right.







After a moderate kick-up, Schumacher steps directly toward plate for release.

Hal Schumacher demonstrates the niceties of a good simple wind-up and delivery, stressing a short pumping action, a smooth pivot, a moderate kick-up of the front leg, and a balanced follow-through.

EXCLUSIVE SCHOLASTIC PHOTOS





Back leg comes through so that pitcher faces batter squarely.

here.
not to
rget—
dime.
s mitt
of the
chin a

e ball many of easne ree ball too or the as the ne ball

s diste the on the o. The tarely, tubber back ply to

th all

pitch.
rve in
is a
movetically
of the

e left ra imveight re fo-'s taronally tly in

from

body, turns swung and the

ACH









tion

mu

pla

slig

abo

wa

eye

and

ma

star

thr

Oth

pre

run

seld

g00

pito

tak

nin

kic

mal

live

deli

wit

tak

try

thre

I

A

T

PICK-OFF AT FIRST

Schumacher assumes a position with the left toe slightly opened and the hands about belt high. The runner is watched out of the corner of the eye. In picture No. 2, Schumacher is just starting to bring his arms up. Perceiving that the runner is too far off the bag, he pivots quickly on the rear foot, steps toward first, and throws. Note that the toss is made with a full-arm motion from a perfectly balanced position. Too many youngsters, in their haste to pick off the runner, throw with a jerky motion, putting unnecessary strain on the pitching member.

PICK-OFF AT SECOND

With a runner on second, the front toe isn't opened as much and the head is slightly turned toward the runner. Schumacher makes his toss to second with a quick hop-step action, wheeling to the left, and stepping directly toward the bag with the left foot. The throw is made with a quick but smooth motion—there is nothing herky-jerky about it. In both instances, the throw is aimed low to the inside of the bag, so that the coverer can make the catch and the tag in one motion.

pitcher is now facing the batter over his left shoulder with the left side turned toward the plate.

As the pitching arms swing back, the left foot comes forward and hits the ground with the toe pointed straight at the plate. The arm now comes through, then the body and the right leg.

If these movements are executed smoothly, all the power of the body will flow behind the pitch with no undue strain on the arm. Additional impetus is supplied by a violent push-off with the right foot. The pitcher should follow through smoothly, not cut off his arm action abruptly, and should finish with the feet exactly parallel—ready to move easily in any direction.

Now let's return to the kick of the left leg. Note (in the pictures) that this kick is not exaggerated. Many beginning pitchers like to kick the leg up high and bring the pitching arm all the way back and down, in the hope of picking up some extra momentum for their fast ball. What they actually do, in most instances, is throw themselves off balance.

The young pitcher should content himself with a moderate kick-up commensurate with his body build and style of pitching. The high kickup may be employed later as balance and confidence are developed.

Now let us assume that the batter has reached first. The pitcher's task is now multiplied by two. He must keep the runner close to the bag and at the same time work on the batter.

This is particularly tough for the schoolboy pitcher and demands a great deal of practice. Too many youngsters let the runner worry them to much—thus taking some of the effectiveness off the pitch. That, of course, is exactly what a smart base runner always tries to do.

A proper technique on the mound will take most of the worry off the pitcher's shoulders. The hurler should take a position with his left side turned toward the plate, slightly opened toward first.

The right foot is placed along the inside of the rubber (the size and depth of the pitching hole will determine the most comfortable posi-











ent

-up

ild

ck-

al-

ped.

at-

er's

He

the

on

the

s a

any

rry

ome

tch.

at a

s to

und

the

rler

left

ght-

the

and

de-

osi-





tion of the foot to obtain the maximum leverage), and the left foot is placed forward with the toe opened slightly toward the plate.

The ball is held in both hands about belt high and the runner is watched out of the corner of the eye. The head can be moved back and forth, but the body must remain motionless. Once the body starts turning toward first, the throw to first must be completed. Otherwise it is a balk.

The pitcher's main objective is to prevent the runner from getting a running start to second. Bases are seldom stolen on a catcher with a good arm. They are stolen on the pitcher who permits the runner to take a long lead and a running start.

As further protection against running starts, the pitcher should not kick his left leg as high as he normally would in the pivot and delivery, and he should not make his delivery as deliberate as he would with no one on base.

If the pitcher feels the runner is taking too ambitious a lead, he may try to pick him off with a quick snap throw. This is done by whirling

quickly on the right foot, stepping toward first with the left and throwing to the baseman. The ball should be kept down low so that the baseman can make the catch and the tag almost simultaneously.

A lot of smart pitchers, with particularly fast runners on first, like to chase them back with two or three tosses. The tiring effect produced by coming back to the bag a few times often takes the edge off the runner's fast break.

If the pitcher likes to bring his arms overhead before bringing them to the rest position, he should be warned that the arms must come to a complete stop before he can make his delivery to the hitter. Otherwise a balk will be called.

The pitcher can, however, whirl and throw to first any time during the descent of the arms. This is effective against a runner who starts taking his lead as the arms descend.

A fairly effective stunt is to bring the arms to the rest position, and alternately turn the head to look at the runner, then at the hitter. After doing this several times, the pitcher, just as the head starts turning toward the hitter, suddenly whirls and throws for the pick-off.

The pick-off throw to second is a much more difficult stunt inasmuch as the pitcher must make a reverse pivot. The most effective way to do this is with a quick little hop-jump.

The pitcher sets up with his left side facing the plate. He watches the runner out of the corner of his eye or turns his head slightly to do this.

The throw is executed by whirling to the left with a quick hopjump movement. This brings the body around quickly and effectively so that the left foot is pointing directly at the bag. The throw is aimed low and to the inside of the bag, facilitating the tag by the coverer.

The pick-off may be a set play, with the sign being flashed by either the catcher or the shortstop; or it may be a spontaneous affair. In the latter situation, the best time to throw is when the shortstop's knee appears past the line of the runner's body. This is a good sign that the shortstop has gotten the jump on the runner.

No treatise on pitching is com-(Continued on page 48)











Distance Running

By RICHARD LANE BERNSTEIN

CHOOLBOY runners vary so much in body build and rate of growth that it is next to impossible to prescribe a standard training schedule or a standard running form.

ula

exh

and

usu

tech

twe

the

der

car

rec

sur

no

oxy

tur

res

cal

obs

sho

ing

figi

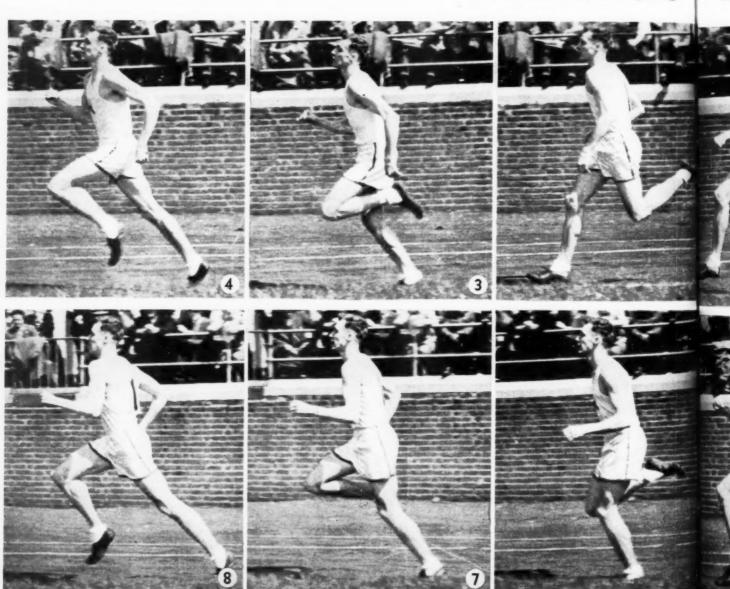
T

This is particularly true of distance runners. Anybody who has been around distance men for any length of time knows that every man possesses a style of his own—a method of pacing, breathing, and moving his arms.

What is one man's meat may easily be another man's poison, and it will behoove the coach to study his boys carefully and regulate his program according to individual needs.

This doesn't mean that no criteria for good form exist. They certainly do, and must be stressed continually by the coach. The arms, for example, help the distance runner gain momentum as well as balance, and should be swung back and forth in a manner similar to drawing in a rope.

The legs move rhythmically in an even stride and the breathing is reg-



ular, with the runner inhaling and exhaling freely. Athletes who gasp and choke in the middle of a race, usually possess a faulty breathing technique.

ate

m-

ard

ın-

is-

as

ny

ery

ind

ilv

vill

Dys

am

ria

alv

lly

ole.

10-

nd

in

a

an

eg-

There is a definite correlation between the carriage of the body and the breathing mechanism. The head should be held high with the shoulders back and the chest thrust forward. When the chest is properly carried and the arms swung correctly, the lungs will be free to insure a good intake of air.

Where the arms are swung with no regard for balance, undue pressure is put on the lungs and the oxygen intake is cut down. This, in turn, may produce a break in the stride—and breaking the stride represents one of the best ways extant of losing a race.

The mile runner is constantly called upon to use his head. If he observes a fixed time pattern, he should pay careful heed to the clockings for each lap so that he can figure out just how fast to go the remaining laps.

Some runners like to set the pace for most of the mile and then stave off challenges at the finish. Other milers prefer to follow a pace-setter most of the way and then move up into contention the latter part of the gun lap.

The coach must analyze his milers and determine which method is the most suitable for each. In setting the pace for a race, the leader must take cognizance of the fact that if he goes too slow he may lose the lead and be forced to follow somebody else's pace; and that if he goes too fast, he will probably tire himself to the extent that he will lose out in the finishing sprint.

He must, therefore, find a happy medium—a pace which is both leisurely enough to maintain first position for him and fast enough to keep his opponents behind him.

This can be determined in workouts. By letting each of his runners take turns at setting the pace, the coach can quickly learn which of his charges are capable of being front runners.

The front runner or pace setter must have exceptional natural speed, stamina, and, above all, a keen sense of timing. He must pace himself so that he will not be too fatigued to defend his lead in the stretch. Many front runners find that whenever they follow somebody else's pace, they turn in their poorest times; therefore, they attempt to grab the lead as early as possible and hold it.

The runner who depends upon his kick to come from behind must also possess speed and stamina, but finishing speed is the first prerequisite. He must also know when to start his sprint. This is a very crucial move in a race; for sprinting too soon is just as bad as too late. Just when is the proper time to make this move can be determined in time trials and intersquad workouts.

I have always believed that crosscountry is a great proving ground for milers. The running up and down hills, leaping streams, running straightaways, and traveling distances far longer than the mile, offer the distance runner an excellent "laboratory" in which to experiment as well as keep himself in shape during the fall. Many milers, who run overdistance in the fall, find the mile easier in the spring.

The cross-country man depends wholly on his wind, his pace, and his will to win. Body lean is important, especially in running up steep hills. The arm movement, as in the mile, must be even and the carriage well-balanced.

Cross-country is also a superb teacher of racing strategy and a fine delineator of the importance of pace. It keeps the runners in fine shape and is the reason come spring for some shockingly good early season performances.

A good miler must carefully coordinate his breathing and his running. Coordination should be driven home constantly. A good way to stress the proper arm movement is to tell the athlete to walk with his arms swinging just as they do in running. After a while, this will become perfectly natural.

The start of the distance race is as important as the finish. A runner should always try to get a good start and should practice this continually. He should be taught to dig out the moment he hears the gun, taking care not to be boxed in and at the same time cutting for the inside lane as soon as he can.

A runner should be prepared when he challenges to pass. He should expect the man ahead to put on a sprint and try to stave him off. But he should be confident in his ability to outsprint the man to the desired position.

Sprinting at the tail end of a mile requires the ability to drive. Driving with the arms and legs in unison furnishes that additional speed and smoothness which so often spells the difference between victory and defeat.

When sprinting, the runner should get up on his toes and use his arms to produce that extra ounce of momentum. He should also bring his legs up high and keep his natural stride.

Some runners have a bad habit of looking back during a race to see where their opposition is. This can be corrected by stressing the point that looking back produces a break in stride and a reduction in speed. In due time, the boy will learn to concentrate on his own race and not that of his competitors.

I have always believed in the value of visual aids, especially of motion pictures of famous Olympic

(Concluded on page 61)





BILL HULSE, Miler

The former national mile champion runs with a long, easy, bouncing stride in perfect keeping with his strong, rangy build. Note the nice body lean, relaxed forearm carriage, forward thrust of the head, and fine bounce and drive off the landing foot. Also noteworthy is the manner in which the legs and arms propel the body directly forward. There is no sway, no toeing out, and no cross-body arm action.



N DM-B (0) TEMBNI

As a service to its readers, Scholastic Coach offers this periodic round-up of new sports equipment items. For further information write to: Scholastic Coach, New Equipment Dept., 7 East 12 St., New York 3, N. Y.



PLASTIC LENS. Made especially for safety plus comfort by Wilson Products, this one-piece plastic lens gives athlete clear, unobstructed vision and complete protection. Adaptable to cold weather outdoor sports or warm indoor sports; low heat transmission of lens prevents fogging. Lenses are available in clear or green acetate.

e UNIFORM HANGER. This extra heavy duty hanger provides individual facilities for faster, more thorough drying of uniforms. An American Playground Device Co. product, it is built of heavy, cold rolled steel rod, is rust-proof, and will last a lifetime. Its possibilities for basketball gear were shown in January.



 LOW-PRICE RIFLE. The new Winchester single-shot bolt-action weapon features a bead front sight on a ramp with a detachable sight cover and a peep sight with adjustment for windage and elevation mounted on the end of the receiver. Also possesses an automatic safety.



BATTING TEE. Designed to pack several hours of fun into a normal 45-min. play period, this new W. J. Voit Rubber Corp. tee is sturdily constructed and adjustable from 21 to 39" heights. You simply set ball atop soft rubber tip of tee, swing, and ball is in play.

e WARM-UP JACKET. Made of Nylon-coated Neoprene, this extra full-sized Hodgman jacket is lightweight and windproof. Features extra under-arm sleeve length, zipper front, and pleated back. Permits easy and flowing action with no bulkiness. Material unaffected by perspiration.



• FOAM RUBBER INSOLES. These LaFome insoles, produced by Easy Walk Corp., cushion all weight-bearing points of foot against shock, and lessen foot fatigue. Far superior in comfort and lasting qualities. Each pair comes packed in a celephane envelope.



- SOCCER SHOE. Manufactured by Geo. Gillis Shoe Corp., this shoe has detachable studs which meet regulations. Male cleats screw into a steel plate in heel and toe. Toe is extra strong though made of latest of lightweight materials. Very important is rigid shank and combined stitching and nailing which secures outer sole to upper.
- DOW-METAL CROSSBARS for pole vaulting and high jumping meet official specifications and last three years or longer. Manufactured by the K. & P. Athletic Co., they are uniform all the way across, painted in black-and-white stripes, offer no danger of splintering, and cost less per season.



TOP NOTCH-50 YEARS NEW



This year marks the Fiftieth Annito any for the makers of the famTo North basketball footcan truthfully say
the is 50 years new
two are, starting
the in-



and 39" atop ving,

pair hane Double heel cushion Eliminates bone bruises



Built up arch cushion Fast action comfort



Full cushion insole Complete foot protection



COACHES

Place your 1949 orders now with your Sporting Goods Dealers!

BEACON FALLS RUBBER FOOTWEAR



High School Tennis

PHYSICAL education program, to be truly progressive and functional, must recognize the need for preparing boys and girls for those sports and recreational activities which may be carried

over into later life.

The emphasis today is on base-ball, basketball, football, and soft-ball—all team sports. No one can deny that these sports are of great value. They promote school spirit, provide an outlet for restless energy, build character, and aid in the development of a sound, healthy body.

The fact remains, however, that these sports possess little, if any, carry-over value other than the impregnation of future spectator interest. That's why every physical education program should include many of the recreational-type sports which the student may continue to play as an adult.

Tennis is a particularly fine example of such an activity. Unfortunately, however, like too many other worthwhile recreational activities, tennis does not enjoy a conspicuous role in the average school program. There are a number of reasons for this. Among the more important are:

1. Inadequate facilities.

2. Wrong type of court surface.

A dearth of qualified instructors.

4. The little time devoted to the teaching of its skills in the activity program.

By GEORGE L. SEEWAGEN

THIS is the first of three tennis articles by George L. See-wagen, one of the most superlatively qualified analysts in the game. An outstanding professional player, he is president of the Professional Lawn Tennis Assn. and a coach of three teams -St. John's U. of N. Y., the Eastern Lawn Tennis Assn. Junior Davis Cup squad, and the E.L.T.A. Junior Wightman Cup squad. Four of his proteges last year captured titles in Eastern junior, boys, and girls play. In his forthcoming articles, both of which will be thoroughly illustrated, he will dwell at length on the mechanics of the strokes.

What can be done to rectify this condition?

I believe that a long range, wellplanned program is essential, embracing:

1. A recognition of the need and the desirability of including tennis facilities in the building plans of schools.

2. Schools without tennis courts should seek ways and means of providing them for their students.

3. Schools unable to obtain tennis courts should make every effort to utilize the public park, semi-

private, and private club courts.

4. When tennis courts are planned as part of the facilities, the emphasis should be on hard courts of either cement or asphalt composition. While more expensive to install, these courts require little or no expense for upkeep. Clay or dirt courts not only require constant attention, but are unavailable for all-year-round play. Cement or asphalt courts may be played on shortly after the heaviest rain and, therefore, are available in the early spring and late fall.

5. Whenever possible, every school should engage a qualified instructor to insure proper instruction in

the fundamentals.

6. The teaching of tennis skills should be a definite part of the activity program of all schools, with every student participating.

7. The colleges responsible for training physical educators should engage a tennis expert to prepare and conduct a sound course in the strokes and fundamentals. An attempt should be made to develop specialists in not only tennis but other leisure-time activities such as golf, bowling, etc.

It will take some time for these objectives to be realized. Meanwhile, steps should be taken to improve the existing conditions.

Where tennis is included in the program, the usual procedure is to assign the instructional duties to a faculty member who either plays,

(Concluded on page 18)

"best kicking and passing ball l've ever used!"



or

d. ly

or ld

re

op ut

as

se

n-

he

That's what record smashing pro kickers and passers, All-Conference collegiate stars, and coaches with enviable records told us after exhaustive tests in wet weather...day and night... punting and place-kicking... passing and receiving...centering and faking. After years of research, here's the ball the players prefer.

New VOIT XF9

has played, or merely has an interest in the game.

Pupils seeking instruction and advice from this coach usually wind up with unsound strokes and form, and, more serious, a loss of interest in the game because of their slow progress and inadequate instruction.

In my 12 years of teaching experience, I have found it more difficult to teach a youngster who has had improper instruction at school or summer camp, than one who is having his first experience with the sport. In tennis, it seems, an individual can more easily acquire bad habits and retain them longer than in any other sport.

Just what can the physical educator and the inexperienced tennis coach do to help their pupils? I feel that the following points can be included in every school activity program today:

1. A simple explanation of the rules and a demonstration of them either on the school tennis courts or on an improvised court in the gym. For example, demonstrate and explain a volley, a smash, half volley, foot faults, a let, and an ace.

2. The system of scoring in tennis.

3. A knowledge of court attire and court ethics.

4. The importance of sportsmanship on the court.

5. Simple fundamentals of strokes, grips, footwork, etc.

6. Advice concerning selection of equipment.

Possibly the best way to create and stimulate interest is to arrange for a tennis clinic. The Wilson Sporting Goods Co. has contributed a great deal in this respect. Through the courtesy of Wilson, such wellknown tennis figures as Don Budge, Charles Hare, Frank Guernsey, and Mary Hardwick, have conducted many free clinics at schools, colleges, public parks, and private

A. G. Spalding & Bros. has just recently engaged Welby Van Horn to represent them and conduct clinics.

The Professional Lawn Tennis Association is endeavoring to accommodate as many requests as possible from schools which would like a member of the Association to conduct a free clinic.

At these clinics, either on an improvised court in the gym or on the school outdoor court, the fundamental strokes are explained and demonstrated, and the pupils given an opportunity to have their strokes analyzed. Questions are answered and discussed by the professional, and advice given on the choice of equipment.

To conclude the clinics, a one or two set exhibition match is usually played to demonstrate the various strokes and tactics used by experienced players.

Another excellent method of promoting interest in the schools is the use of tennis slides and films which are available to any school desiring them. Sources for this material are: The Athletic Institute, Wilson Sporting Goods Co., and the U.S. Lawn Tennis' Association.

Schools which place particular emphasis on tennis and other leisure-time activities which may be carried over into later life, are making a real contribution to the preparation of pupils for a full, well-rounded life.

SOURCES FOR FREE AIDS

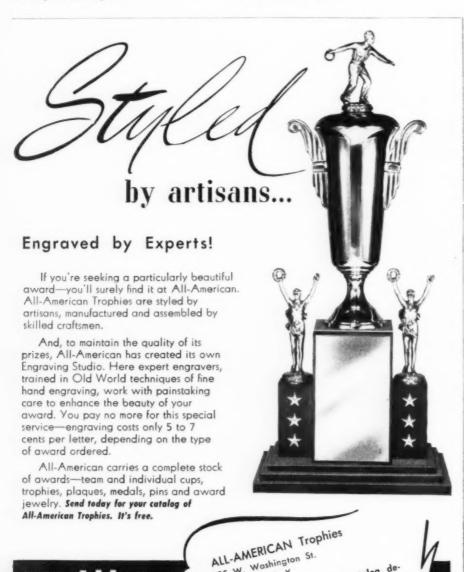
Wilson Sporting Goods Co., 2037 N. Campbell, Chicago 47, Ill. (clinics and visual aids).

A. G. Spalding & Bros. (Att.: Welby Van Horn), 401 N. Broad St., Philadelphia, Pa. (clinics).

Cortland Line Co., Cortland, N. Y. (clinics by Coach Walter Debany).

Professional Lawn Tennis Assn. (Att.: Ruby L. Sheppard), 49 E. 63 St., New York 21, N. Y. (clinics).

U. S. Lawn Tennis Assn., 120 Broadway, New York, N. Y. (visual aids). The Athletic Institute, 209 S. State St., Chicago 4, Ill. (visual aids).



125 W. Washington St.

special engraving service.

CITY

Syracuse 2, N. Y.

Name

Address

Please send me your FREE catalog de-scribing All-American Trophies and your

STATE

West Washington St.

Syracuse 2, N.Y.



passes DRY in wet weather

New VOIT XF9

of

of

ate
nge
son
ted
ugh
elllge,
and
ted
col-

reics. inis acas ald tion

the ememan okes ered onal, e of

ally ious cpe-

the hich ring are: ort-awn rular ther may are the full,

-

37 N.

and

7elby

hila-

N. Y. y). Assn.

E. 63 s). roadaids). State Imagine! No more touchdown passes dropped because of a slippery pigskin. No more passes intercepted because the passer's fingers skidded. After tests, star players grinned approval and told us, "Here's a ball I can really handle." The secret is in the Voit sure-grip rubber cover.

P.S. It's new—it's different even to the leather lace which helps the aim, too.

FOILED:

O be sure, the days of The Three Musketeers are gone. No longer do pirates leap on to their prey and slash their way with swords to the booty. Nor do cavalry brigades cut down the cannoneers with sabres to clear the way for the infantry.

But the fascination of sword play has not disappeared. The combat instinct is deeply rooted, and kids will always do battle in some form or another. They will punch or wrestle each other down, or whack at each other with sticks—plain or sword-like.

The arts of boxing, fencing, and wrestling owe their development to this instinctive desire.

Of the three, fencing is perhaps the most estimable. It has the best carry-over value and best meets the demand for good leisure-time activity. It is also the least bruising of the three and is one of the most enjoyable and healthful activities on the winter calendar, particularly in areas where outdoor sports are not consistently available.

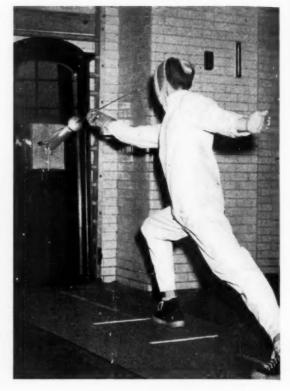
In Europe, and especially in France and Italy, professional championships arouse a great ado and draw huge galleries. This is quite natural in view of the fact that fencing is not only a great spectator sport in these countries, but a great participant sport as well.

And when you have learned how to do a thing yourself and know what it calls for, your interest in it is definitely more intense and certainly on a higher plane than when you are merely interested in the outcome—who won.

Contrary to some opinion, fencing is not a sport for the lame, the halt, and the blind. Nor is it exclusively designed for the "nobility." It is definitely suited to the temperament of American boys and girls.

It possesses all the fine attributes that make for a highly satisfying and thoroughly enjoyable activity.





Elements of the author's unique mirror practice device. Above, left: foil blade with shank shortened and threaded, and bell guard. Above, right, top to bottom: deflection spring (3½" long and 1½" in diam.); threaded plate screwed into each end, center drilled and tapped, one end to hold foil blade, other to screw onto swivel pan head; arm of wood or metal, similar to forearm; swivel pan head which is set into forward end of arm; camera tilt top. Right picture: camera tilt top and arm mounted.

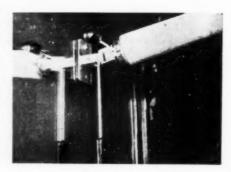
It is fast and calls for a constant matching of wits with the opponent. And it provides a good work-out, too. I have had football players poopoo the sport, then, upon sampling it, "go" for it in a big way.

The popular conception that fencing is dangerous, is unfounded. Where the boy is properly equipped and has learned to handle the weapon correctly with first-rate sportsmanship, devoid of any blood-in-the-eye feeling, fencing is no more dangerous than any other sport.

For the past 18 years, high school fencing has enjoyed great success in New York City. Prior to World War II, 20 schools participated in the Public Schools Athletic League Tournament.

Although faculty coaches were scarce, the teams had enthusiastic volunteer alumni coaches who taught the boys evenings while the faculty advisor looked after them during the after-school practices.

By WILLIAM F. STROBEL



The effectiveness of this system is indicated by the fact that most of the country's outstanding fencers for the past 15 years have been former P.S.A.L. boys. Five of the members of the U. S. Olympic team were exhigh school fencers—four from New York City and one from nearby Newark, N. J.

I mention this by way of proving that fencing can thrive without professional coaching. True enough, the professionally coached team has an advantage. But fencing can flourish without such guidance. The will to accomplish can offset this lack.

The high school teams in New York consist, not of the orthodox three men, but of six. This puts the sport on a participant par with such other sports as basketball, hockey, etc.

The six men are grouped in ranked pairs—A, B, and C, according to ability. A match consists of 12 bouts, four in each group. Whenever it is necessary to resolve a tie, as in a championship, the three ranking members of each team fence each

(Continued on page 22)



kicks DRY on a wet field

Amazing! Accurate kicking in a cloudburst. No more costly bloopers from slippery fingers or shoes. After tests, pros with kicking records on the books, and college stars told us they much prefer to kick this ball, wet or dry. Use it and watch your wet weather punting averages soar.

of

ers xew by

ng ohe an sh to

rk

ee

er

ed

to

ts,

H

New VOIT XF9

THE NEW FENCING MASK



by Castello

Again Castello leads with the finest in fencing equipment. The new mask is a masterpiece of craftsmanship.

- CHROME PLATED BEAUTIFULLY FINISHED
- PERMANENT RUST RESISTANT
- INSIDE DULL BLACK FINISH RELIEVES EYE STRAIN
- NON-TARNISHING

Castello

is standard for

FENCING EQUIPMENT

A complete line of finest equipment at lowest price has been the established record and service of the House of Castello since 1914.

- FOILS, DUELING SWORDS, SABRES
- UNIFORMS AND APPAREL
- MASKS AND ACCESSORIES
- ELECTRICAL EQUIPMENT

Olympic Quality

Castello has equipped U. S. and other nations with Olympic fencing equipment for many years. Rene Pinchard, Olympic Coach, says, "I have chosen and recommended the Olympic quality fencing equipment produced by the firm of Castello."

Start a Team!

We can give you all the necessary information to form, equip, train and schedule a team for men, women or both. Where a trained instructor is unavailable, Castello's recognized textbook on fencing can be used with excellent results.

See your local sporting goods dealer or write to

CASTELLO FENCING EQUIPMENT CO., INC.
America's Oldest and Largest Importer and
Manufacturer
232 East 9th Street
GRamercy 7-5790

other. The team winning two out of these three bouts is declared the winner.

The foil is the basic weapon of the three (foil, epee, and sabre) used in the sport, and the only weapon employed in the high schools. Once a boy has learned to handle it with skill, he may easily progress to the other two.

The epee, like the foil, is a thrust weapon and only touches made with the point are valid. With the sabre, you are permitted to cut with the edge as well as thrust. This calls for an education in the use of the edge. As a rule, however, most good foil and epee fencers also make excellent sabre men.

The first step in taking up a sport is to analyze its basic concept. In fencing, the idea is not to be touched (stabbed or cut) by the opponent's weapon while making every effort to touch him with yours. Around this idea should be developed the techniques which will produce the best results. Always bear in mind the basic purpose and evaluate the boys' movements in light of it.

The first requisite, of course, is good health. To learn to fence, the boy must be in good condition; and to engage in competition, he must be in the best of condition. Never permit a boy to participate without first checking his health.

Every sport has a neutral position in which to stand and from which to maneuver. In fencing, it is the "on guard." Step by step, go from one idea to the other until finally you have the entire problem laid out and fully understand what the needs call for. Then proceed to work on meeting these needs. For example:

- 1. A certificate of good health.
- 2. Getting the boys into condition.
- 3. Practicing the special exercises indigenous to the sport.

4. A carefully graduated program—teaching the simplest movements thoroughly before progressing to the more complicated ones.

Poor foundations result in still poorer structures. Make the foundation solid and precise. Then only will the subsequent building stand up under the use given it. To teach the techniques, I recommend the various books on the sport. After you have looked them all over carefully, choose the one you understand best and use it as a guide for your course.

No amount of practice is worth anything unless the boy can visualize himself doing the movements. This can be done in front of a full-length mirror—in the gym or at home.

As the boy masters holding and

WILLIAM F. STROBEL is a health education instructor at William Howard Taft High School in New York City. As director of fencing for the local public school athletic league, he is one of the men chiefly responsible for the surprising popularity of the sport in the New York area.

then moving the body in good position (balanced and relaxed), you can glue a rubber pad to the mirror at the correct height and have the boy practice aiming at it and reaching for it (lunging) until he has mastered this very important body and weapon action.

Though it looks simple, it is far from that, and the boy would be making a grave error to feel satisfied until he can do it to perfection and with the utmost precision. I repeat again—a structure built on a poor foundation will crack up when subjected to the slightest strain.

Finally, when the boy is ready to advance a bit, you may rig up a contraption (as shown in the accompanying illustration) and have him practice a good many of the more complicated movements.

This device consists of a fulllength mirror drilled to hold a movie tilt top, arm, and foil, at a distance from the floor equal to the distance of the average fencer's arm and weapon from the floor. The tilt top can be swung left to right and up and down to simulate the various positions known as "lines of engagement" a fencer may assume.

Into the end of the arm, which is made of wood or preferably a light metal, is fastened a camera panhead (ball and socket joint) which can be set at any angle to completely imitate the arm and wrist position of a fencer.

On to this pan-head is screwed a deflection spring, into the other end of which is screwed the foil blade with its bell guard. The spring serves to allow the blade to be deflected out of position by the oncoming blade of the person practicing. A small area around the tilt top base has a rubber pad to protect the mirror.

One of the most important skills in fencing is to make an attack so that the point of the weapon scores, while the point of the opponent is prevented from landing on the attacker (to touch and yet not be touched).

Let us see how the device may be utilized in the practice of a simple straight thrust in the engagement of

(Concluded on page 40)



handles better, WET or DRY

Yes, it plays, handles, feels, kicks, passes just right. Keeps that new football performance throughout a game and doesn't gain weight or change its feel just because of the weatherman. Use the XF9 and play all your games, regardless of weather, on merit, not luck. Here is the greatest contribution to football equipment since the invention of the inflated ball.

New VOIT XF9

23

a in h

a.

you rror the achhas

far

be atistion reon a when n. by to a acnave

the

fullovie ance ance and top d up rious age-

ch is light panhich comwrist red a

olade erves ected ming g. A base mir-

skills ek so eores, ent is e at-

mple nt of

Run Your Own Clinic!

SO you want to run a sports clinic. You scratch your head and wonder what

your head and wonder what to do. Practically no helpful literature is available, and few members of your association have ever helped conduct a clinic. Where do

you start?

Maybe you can glean a nugget from the program of the Athletic Department of the Westchester County (N. Y.) Recreation Commission. Westchester County has run any number of hugely successful clinics and a surveyal of its setup may help solve many of your problems.

Westchester's program was touched off innocently enough in the fall of 1946 when an interested group of coaches and officials asked us to get Clair Bee and his L.I.U. squad to demonstrate the finer

points of basketball.

Bee put on a terrific show, stressing the fundamentals, and sold the group on the idea that this was just what the doctor ordered. This called for a repeat performance in 1947 with Ken Norton and Manhattan College as the attraction. When this clinic also played to a capacity house, it was decided to make the affair a yearly event.

Shortly thereafter, some wise Westchester coach suggested that we ought to expand the program to include football, baseball, track, tennis, and golf. So the Athletic Department of the Recreation Commission rolled up its sleeves and went

to work.

Funds are a prime essential in the operation of clinics, and we solved the problem by asking the groups that would benefit most from the program to pay part of the costs. This they willingly agreed to do—and still do.

In our present setup, Section One of the New York State Public High School Athletic Assn., the Westchester County Private and Parochial School Athletic Assn., and the Westchester County Coaches Assn., all pay us \$50, while the Football, Bas-

ketball, and Baseball Officials Assns. each donate \$25, giving us a working capital of \$225.

Why the differential in the assessment? Simple. The three groups that pay \$50 participate in all the clinics, while those which pay \$25 take part only in one.

Now that some operational funds are available, where do you go from here? Where can you get top coaches and teams to run your clinic for such a small amount of money?

This calls for super salesmanship. You must sell the idea to the guest attractions. If it is a professional team, stress the publicity value and the possibility of drawing spectator trade from the area.

If the attraction is a college team, emphasize the good will engendered toward the college and the possibility of drawing good athletes to the school.

Usually you will find someone in your group who knows these people personally and is willing to contact them for you.

The next step is deciding on a suitable date. Make your arrangements far enough in advance so that you can get the right coach at the right time. We work almost a year ahead. As soon as a clinic is completed, we start right in on the next

one. Time moves too fast to let things ride. Act quickly or you may wind up with no guest lecturer at all.

As an extra inducement, we offer the college coach a special service—a list of all the high school coaches in the County. This enables him to maintain a closer relationship with them in the matter of hearing about good college prospects.

Now let us return to the financial end of the picture. How much does it actually cost to run one of these

clinics?

We ran our football clinic this year on Saturday, September 18, at Memorial Field, Mt. Vernon (N. Y.). Through the cooperation of the Mt-Vernon Recreation Commission, we obtained the field without cost.

We had as our attraction the N. Y. Football Yankees of the All-American Conference. Their cooperation was such that they made us feel we were doing them a favor by permitting them to put on the clinic. They came up from the Yankee Stadium in a chartered bus, and all it cost us was the expense incurred in feeding them sandwiches and coffee. Our total cost for running this clinic was \$50.

Where could you get an attraction like that for less than several thousand dollars? All they wanted was publicity and good will, and they surely got it. We had a turnout of

5,000 spectators.

The N. Y. Football Giants have been contracted for our clinic next September. A favorable reply has already been received, with the suggestion that we contact them again in the spring when the National Football League schedule is drawn up.

In basketball, we had Gordon Ridings and his Columbia U. squad as the attraction. The N. Y. School for the Deaf in White Plains was used as the site and it proved an ideal setup inasmuch as the gym could seat 1,200 spectators.

We used the auditorium at night (Concluded on page 26)

RWIN KLEIN will be remembered as the famous "King Kong" of N.Y.U. football and basketball fame (1933-36). All his driving energy is now being put to excellent use by the Westchester County (N.Y.) Recreation Commission. In addition to being assistant supervisor of athletics, Mr. Klein is vice-president of the Board of Approved Football Officials and president of the Board of Approved Basketball Officials. In this triple capacity, he has played a leading role in the administration of Westchester's comprehensive clinic setup.



REVERE ELECTRIC MFG. CO.

6019 BROADWAY

let may er at offer ceches m to with bout ncial does hese this 8, at Y.). Mt-, we V. Y. nertion l we mit-Chey

lium cost eed-

Our was

tion nou-

was

they

it of

nave next

has

the

hem

Na-

e is

Rid-

d as

l for used

deal ould

ight

CH

CHICAGO 40, ILLINOIS

INDOOR AND OUTDOOR LIGHTING EQUIPMENT TO SERVE EVERY NEED

DOLCOROCK High Surface Floor Coating

FOR "FASTER" PLAYS ON SAFER GYM FLOORS

DOLCOROCK imparts a brilliant, glossy finish to your gym floor — like an extra layer of crystal-clear quartz!

Having a high coefficient of friction, DOLCOROCK cuts down "slide"—really makes games "faster" by permitting sudden starts and stops while reducing slipping. That means an extra margin of safety for sports participants. Spectators, too, like DOLCO-ROCK's attractive lustre.

Virtually impervious to grease, dirt, ordinary acids and alkalis . . . easy to apply and maintain . . . equally correct for hardwood, cement and magnesite floors.

Write for the comprehensive DOLGE booklet "floor Maintenance"

THE C. B. DOLGE CO.
WESTPORT, CONNECTICUT

for a session confined to coaches and officials. At this time, Ridings expounded the finer points of the game to the 150 high school men in attendance. We also had dinner in the school's dining room.

All these facilities were provided without cost. The only expense was the meal, which was furnished at cost. Our expense for this clinic ran about \$75 maximum.

We always pay for the dinners and traveling expenses of the visitors, and include a small honorarium for the coach. So far, we have featured only top-notch coaches and have signed Frank McGuire and his St. John's U. team for our next basketball clinic on November 15.

For track this spring, we will have Emil Von Elling, veteran N. Y. U. and Olympic track coach, who will bring with him as demonstrators such track luminaries as Moon Mondschein, decathlon champion; Reggie Pearman, ICAAAA half-mile champ; Stan Lampert, ICAAAA shotput champion; and Ira Kaplan, who recently defeated Harrison Dillard, Olympic sprint titleholder.

This event is set for Hackley Field, Tarrytown, on Saturday, April 2. The field will be furnished free of charge, and since we will pay Von Elling just expenses, the total expenses will not exceed \$40.

So far we have spent a total of \$165 for three clinics. That leaves \$60 yet to be disposed of.

Another clinic is set for Saturday, April 9. This will be a baseball affair. Our demonstrating host will be the Port Chester Clippers of the Class B Colonial League. They have won the league championship for the past two years, and are managed by Al Barilarri, former pitcher with the Washington Senators and Baltimore Orioles.

We will have use of their Empire Stadium in Port Chester. A maximum of \$20 has been set aside for this clinic and we expect a turnout of 1,000 players and coaches.

Early in May at Gedney Feld in White Plains, we will hold a tennis clinic with many outstanding stars of the Eastern Lawn Tennis Assn. participating. The White Plains Recreational Dept. is giving us the use of the field and we expect to make this event the start of a banner year in tennis. At least 500 spectators will attend, and \$20 is the maximum amount for expenses.

For our final seminar of the year, we are indeed fortunate to have the Westchester County Professional Golfers Assn. run a series of clinics for us all over the County. Private golf clubs will be used and top golfers will demonstrate the ins and outs of the game. We have a \$20

maximum for this clinic.

So there you have it—an extensive program of six clinics sponsored by the Athletic Dept. of the Westchester County Recreation Commission for the sum of \$225 or less. We have talent worth many thousands of dollars participating and many more thousands of spectators watching.

These clinics are made possible not through the small amount of money spent on them, but through the voluntary efforts of coaches and players

Our next step is organizing these clinics so that they will run off smoothly. We appoint a committee of coaches to set up the program, since they know best what the County coaches would like to see and hear.

For example, if it is football, they usually want sequences of plays, organization, fundamentals, T defense, etc. In basketball, they want stress on ball-handling, fast break, conditioning, breaking up a zone, etc. In baseball, the accent is on batting, position play, fielding, etc.; and in track, we stress individual skills, exercises, and the use of equipment.

PUT IT IN WRITING

The committee submits in writing exactly what they would like to have covered. We then contact the team that will put on the clinic and talk over the feasibility of doing what was requested.

All the details are ironed out at this time so that the participants will know exactly what is expected of them when they make their appearance. At the same time, we also determine what equipment will be needed.

Our next trip is to the Recreation Director of the host town. We sit down with him and find out what equipment is available and what equipment will be needed, then try to foresee any problem that might arise such as parking, handling the crowd, etc. All these details are smoothened out at this time, and everyone knows just what his job will be.

Since we cover all of Westchester County, we try to employ the best facilities in the area. We also shift our clinics around so that they are not constantly being held in one community.

There is one more factor to be considered—namely, the weather. If at all possible, select an alternate date. Hence, if the clinic has to be postponed because of weather conditions, you already have another date.

Makers of the World Famous Medart Basketball Scorer and Timer... Over 4000 in Use

MEDART SEC

MEDART SEC

MEDART SEC

VISITORS

VISITORS

WASHINGTON U

Football Scorer and Timer

Here it is...the Medart Football Scorer and Timer...factory tested for hundreds of hours (including outdoor weather tests)...and field tested during the season just past. This means that mechanically and in design the Medart Football Scorer and Timer is "right" from the standpoint of operation and daylight visibility...features that insure accuracy and durability. The Medart Scoreboard is EXTRA large...20' long and 16½' high. All numeral blocks are 2' high by 13½" wide. Records time in minutes and seconds with time left to play diminishing automatically each second. All steel construction with numeral blocks weather-proofed. Reset mechanism permits setting time from 15 minutes down to any length time desired. The Medart Scorer and Timer is such an improvement over existing ones that seeing it before you make your scoreboard investment is a "MUST"!

extennsored

Westmmisss. We

many vatch

ossible int of rough es and

these in off

mmite proat the to see

fense, stress condietc. In atting, and in

skills, ment.

riting ke to ct the ic and doing

ipants
pected
ir ap-

lil be

eation

Ve sit

what

what

en try

might

ng the s are

, and

is job

hester

e best

shift

y are

to be ner. If ernate

to be

other

Write for Descriptive Literature and Prices

PRODUCTS

Basketball Scoreboards
Basketball Backstops
Gymnasium Apparatus
Telescopic Gym Seats
Acromatic-Trampolin
Steel Lockers
Steel Lockerobes

FRED MEDART PRODUCTS, inc.

3535 DEKALB ST.... ST. LOUIS 18, MO.

Leaders for over 75 years in the manufacture of school equipment

MAME			PHYSICAL B	XAMINATION R		PRYSI	BAN
BARROW	OR CUARDIAN	-		coams.		DEPTT	п
ST.	CHECK IF YOU HAVE HAD TO	1/1/1//		but querestions have you be ine type of operation and of that continue injuries have y penily injury and done. penalth			
Dete		_					
Weight	Haight	Weight	Shright	Weight	Height	Weight	Blogde
Devolupe							
Nourishe	and .						
	Ame						
SERVE	Risprorm						
18174	Pleaster Works					_	
_	Vision R L	-	L		ı	R	E.
EYES	Ecophiliaisma						
	Conjunctive						
NECK	Thyroid						
	Februar of Years's						
CHEST	-	-				-	
LLNCS	Palpanina						
	Percussion						
	Assembation						

By C. O. JACKSON

HEALTH EXAMINATIONS

ACCORDING to Turner, the basic health function of the school is "To build or promote the health of children, to protect against disease and ill-health, and to aid in securing prompt correction where needed."

The school, to achieve these goals in its two activity programs—the physical education (in-class) program and the athletics (out-of-class) program—must see that every student obtains an adequate health examination and develops acceptable attitudes toward health.

Some states, including Alabama, Illinois, Montana, Oregon, Pennsylvania, South Carolina, and Virginia, have state laws requiring examinations of all school children. Not all of them, however, specify the frequency and type of examination.

Every study of school pupils in the United States bears out the desirability and necessity for an organized plan of health examinations. One survey² of 45,000,000 pupils reported 35,000,000 as reasonably normal, and listed among the others, 6,000,000 suffering from malnutrition, 1,000,000 with damaged hearts, and 382,000 who were tuberculous.

A recent article³ discussing the problem from the standpoint of total population, indicates that from 9,000,000 to 10,000,000 persons are suffering from diseases of the heart and arteries, and of this group, 0.3 to 6% are on the childhood level, and 0.6 to 1% in the young adult population. Furthermore, there are

between 1 and 2,000,000 diabetic persons in this country.

Another statement⁴ says that some 35,000 children have diabetes, 175,-000 tuberculosis, and 500,000 have rheumatic fever and rheumatic heart disease.

It is unlikely that the great majority of these individuals will ever participate in athletics, but since most of them do engage in relatively vigorous activities in the required physical education program, it is essential that an evaluation of everyone's physical status be made.

Athletes are commonly thought of as superior physical beings, with a state of health so far above the rest of the students, that they can with impunity, ignore rules of health and personal hygiene which others must observe. The phrase "big and strong as an athlete" is a reflection of this thinking.

Most coaches will agree that the boys on the teams are nearly always the better physical specimens. While this may be true in the majority of cases, it should be pointed out that this opinion is usually based on casual observation rather than careful examination. There may be some who lack the fitness necessary for the sport, and a few who perhaps should not compete at all.

What are the facts? According to Wilce⁵, a coach and practicing physician for many years, the "...natural strength, health, and energy of the athlete are commonly accepted as being above that of the average

student..." and while this is generally the case, "boys with active as well as chronic heart trouble, tuberculosis, nephritis, diabetes, or many lesser strictly medical conditions, have and do successfully participate in intensively competitive sports...."

Wilce points out, further, that while "... the number of these cases is not great, compared to the number of boys and girls constructively competing in American sports... my 20 years experience in medicine, and my 40 years experience in sports have convinced me that the number of cases... are greater than is commonly thought."

Patty and Van Horn⁶ in a study of the health examination data for 12,000 athletes in 375 high schools in Indiana, found that 303 boys, or 2½% of the total, were rejected for participation in athletics because of defects.

While this number is small, the fact remains that every one of the entire group, including those turned down, thought they were in good physical condition, and expected to participate in the sports program.

McCormack⁷ in a discussion of a study of 14 basketball teams of 10 boys each, who had played through a season of 20 games, plus tournaments, states that "...the results showed that 11 (boys) were not as fit as they should have been, and six should not have been in the tournament...."

It is possible that in a few cases, defects had developed during the





ENE

ene as erany

hat ises m-

ne.

orts ber m-

ıdv

for

or

for

of

the

ned

to

f a

10

gh

lts as

nd he

es, he Rugged, longer-lasting Pennsylvania Softballs add sparkle to any diamond. Made with a rip-proof molded cover, they'll save games ... save money! Send your teams against competition this year equipped with Pennsylvania Tennis Balls for a sharp, fast, blistering attack. Vacuum-packed for freshness, they'll help win more matches... bring home more trophies. Precision-made with a deep, durable nap, Pennsylvania Tennis Balls retain their bounce longer... perform with top accuracy through many a hard-hitting set.

Order today from your Pennsylvania Dealer! And don't forget...he has your free copies of "Tennis Fun and Fundamentals", Pennsylvania's great new tennis skill book by Bruce Barnes.

PENNSYLVANIA RUBBER COMPANY

PENN-CRAFT PARK



JEANNETTE, PA.



Equals MY OUTPUT

Ex-coach Vaughn L. Snook of Howe, Ind., finds that "working for The Mutual Life has meant greater security." Here's what he says about the career of life insurance selling:

"First, there's the increase in financial security. I know that the success of my job is dependent solely upon the amount of energy expended. Therefore, I've an unlimited opportunity for increasing my earnings. Then, too, there's an added incentive—the knowledge that my work is helping others achieve financial security."

Our records show that many ex-coaches have found success as Field Underwriters with The Mutual Life. Like so many others, you may be especially suited for this well-paying career. Our free booklet, which we'll be glad to send you, will help you predetermine your aptitude. If you qualify, our manager nearest you will explain our on-the-job training program and the Mutual Life Compensation Plan. The plan provides service fees, commissions and a retirement income at 65.

This Mutual Life booklet may be opportunity knocking at your door. Don't fail to recognize it—mail the coupon today.

THE MUTUAL LIFE INSURANCE COMPANY of NEW YORK

NSURANCE	A 40 10 10 10 10 10 10 10 10 10 10 10 10 10			
34 Nassau Stre		New	York 5	, N. Y.

For free booklet address Dept. 15.	
Name	Age
Home Address	**************

season, but it is more likely that they had existed earlier, and perhaps had been aggravated because of the intensive physical activity.

While the greatest hazards usually center around the participant himself, sometimes teammates or others in the school may be exposed to unnecessary danger.

Cottons in a discussion of health conditions in schools says she "...discovered a school with four teachers and almost 200 students, using an open bucket and a common drinking cup. One of the basketball players had a number of the symptoms of advanced tuberculosis, including hemorrhages (but) was not taken out of school or removed from the squad...."

What should the examination include?

Perhaps the first point of agreement is that the examination should be standardized; that is, certain specific items should be incorporated into all examinations to insure a standard foundation.

The school system may implement this plan by providing a uniform blank to all physicians and dentists. In some states, the Department of Public Health prepares and distributes the examination blanks as a public service.

service.

The "school health record" type of index, while intended primarily for the elementary school, could, with a few minor changes, be adapted to the high school as well; and its use would insure the degree of uniformity so essential in keeping accurate records. Since it is a folder, additional written records and information can be enclosed, and the entire blank filed where it will be readily accessible.

The examination itself should include as a minimum, the coverage found in an examination for life insurance. It is recommended that the examination cover the case history, a complete physical and medical check, a tuberculin test, and, for elementary school children, the Shick and Dick tests. It is assumed that the medical examination will also include a careful check of the heart before and after exercise.

For the athlete, the examination should be expanded to include chest X-ray, urinalysis, blood pressure, and any other additional items which the examining physician feels are desirable.

In any case, a casual inspection rather than a careful examination may do more harm than good, since it would tend to give the person a sense of false security.

It should be obvious that an "inspection" at the rate of 50 or 60 persons an hour cannot be considered an examination. A few glaring defects apparent to any trained teacher may be uncovered, but such an inspection is only justified when it is merely a casual dental inspection, or a throat or temperature check to prevent or

THIS is the third of a series of articles by C. O. Jackson, associate professor of physical education at the U. of Illinois. The first installment in November stressed the many health hazards existing in interscholastic sports, and the second article in January presented some practical measures for overcoming these hazards.

stop epidemics of contagious disease. The minimum number to be examined in an hour should not exceed five or six, with approximately "10 to 15 minutes for each one, exclusive of the time necessary for vision, hearing and speech testing, weighing and measuring...."

More time may be provided for the important parts of the examination, if some of the case history and the items listed in the previous paragraph have already been entered on the card by a competent person. In other words, the amount of assistance the physician has prior to and during the examination may help determine the length and thoroughness of the examination.

If a dental examination is given at the same time, this would take another two or three minutes as a minimum. In all cases, whether it is a dental or medical examination, there should be time enough to give a complete examination, and to include some health teaching as well.

The examination reaches its maximal good when it becomes a real educational experience for every participant. This is especially true with younger children, but "teachable moments" during the examination should be utilized by everyone.

How should such examinations be conducted?

Every pupil, regardless of age, should be mentally and emotionally prepared for the examination so he will know why it is being given, what it will involve, and its value to him. This is an educational challenge to the school.

If possible, the examination should be carried on in the privacy of the physician's office and by the family physician, with sufficient time for each student so that the examination is both complete and educational.

Group examinations given at the school are of value when they are well organized and conducted. Such plans usually include having a group of physicians and dentists spend several mornings at the school at stated times during the year.

The individual pupil whose family physician or dentist is among those present, can, of course, go to him, or if no preference is indicated, be sent to one of the others on a proportional basis.

In the larger schools, where a full or part-time physician and dentist are of isdhe er ds ts, ry

IS-

ease.
kamceed
10 to
ve of
aring
and

tion,
the raph
the other
the the the the ex-

en at anniniis a there comclude

edueticiwith molould

age, nally o he what him.

the mily each each is

the are Such roup sevtated

mily hose n, or sent ional

full t are





They're STA-SIZED for lasting comfort

Shrink-treated Wigwam Socks provide foot comfort when it is needed most . . . during actual, grueling competition. Springy wool cushions feet . . . absorbs perspiration. Binding, bunching, chafing are eliminated because Wigwams are STA-SIZED*. The result is extra comfort . . . longer wear. For added sturdiness, heels and toes are nylon-reinforced. Order Shrink-treated Wigwams at leading dealers everywhere.

*Hundreds of home wash-andwear tests show they will not shrink below the knitted size.

Sheboygan, Wisconsin

employed, these men can probably administer the athletic examinations, but will seldom have enough time to do anything but organize the general examinations, and perhaps administer the follow-up.

While there are advantages to having specialists for each part of the body, this is not possible in many areas and seldom constitutes as complete an educational experience. They should, of course, be used as referrals whenever this is indicated.

Where large groups are to be examined, it is both desirable and essential that this be done over a longer period of time. If the examination is to be given by the family physician in his office, it probably can be carried on during the summer months, or at any other mutually convenient time. In schools, the examinations may be carried on either by classes or alphabetically, so that approximately the same number are examined each day, week, and month.

All athletes should be examined before the season opens, as provided by many state associations, and this can be done either at the school in a group, or at the physicians' offices, as indicated by the local situation.

How often should examinations be

Most authorities agree on a minimum of four examinations during the individual's 12 years of formal schooling. These might begin with the kindergarten or pre-school years, with the other three spaced at the 4th, 8th, and 11th or 12th grades. This would provide opportunity for a final follow-up and correction in the senior year of all those still in high school.

Some schools administer an annual examination, but it is doubtful whether the time, cost, and effort justifies the result. In all too many cases, though much time is spent in arranging for and handling such examinations, little time is taken by the instructors or coaches to make any educational use of the information in guidance and counselling. Sometimes, the records are merely filed away to gather dust until the next time, when further information is added.

If a functional program of followup is inaugurated, it is likely that annual examinations may be an unnecessary expense of time and money. Those who need further examinations or re-checks, or who need encouragement and assistance in correcting remedial defects, should be taken care of, but the mass of students who are found to be in good physical condition at the time of the examination do not change materially within a period of several years.

Of course, if an individual suffers an illness or an accident which keeps him away from school for several days, he should have a re-check by a physician, or at least an inspection by a nurse before being re-admitted. If he has ben seriously ill, or injured, a complete examination may be desirable.

In other words, those who need further re-checks or complete examinations should get them, and those who do not probably should have the experience deferred until the next scheduled time.

The athlete should be examined before each season of competition, and after illness or injury during the season, before he is given a "clean slate" and approved for participation. It is desirable to use the official examination blank which most state associations have prepared, so that the physician can not only check the various parts as he completes them, but may also indicate the sport or sports for which he approves the individual.

The boy's physical condition at the time of the examination may result in certification to play a sport such as golf, but with a definite recommendation not to engage in the more strenuous sports of football or basketball. Such recommendations should, of course, be followed to the letter for the protection of the individual as well as the school.

How should the examinations be financed?

The answer is determined by the way the local school has decided "What responsibilities belong to the parent and which ones belong to the school?"

The simplest procedure is for the Board of Education to appropriate money received from tax funds and to organize and carry out an approved plan. Many schools, however, insist that such examinations are not only the responsibility of the parents, but should be financed directly by this group.

DUAL PAYMENT PLAN

Such plans are sometimes modified so that the Board of Education pays for part of the examination, and the pupil and his parents defray the balance. This has the advantage of making both the parent and the pupil realize that the service is not "free," and may be a step toward getting this group accustomed to assuming more responsibility for their own health.

It is possible for some schools having an extensive health program, to usurp some of the prerogatives of the home. The individual pupil who has too much done for him, may therefore not be developing the attitude of self-reliance and responsibility commonly expected of adults.

Whether the Board of Education pays for the examination, the parents assume this responsibility, or the cost is shared, the physicians or dentists who conduct the examinations should be paid an adequate fee.

It is questionable whether the County Medical Society or any individual doctor should be invited or expected to donate services, although this is common practice in some communities. In other instances, only indigents are taken care of in this manner, although a more common prac-

(Concluded on page 62)

who exnext ined ition, g the clean tion. exe asva-, but ports dual. t the esult such commore sketould, r for al as s be the cided the the the riate and oved insist only , but this

lified pays I the bal-mak-pupil ree," etting ming own

hools gram, es of who may attionsilts. ation rents e cost nitists hould

the indid or ough comy inmanprac-



to better SOFTBALL hitting

In Softball as in Baseball . . . the leading hitters choose Louisville Slugger bats to slug their way to victory.

Be sure to look for the famous H & B oval trade mark when making your selection. It's the mark of the finest bat made . . . the choice of all leading hitters.

HILLERICH&BRADSBY CO

HILLERICH & BRADSBY CO., INC.
LOUISVILLE, KENTUCKY

In Softball as in Baseball Louisville Sluggers stand supreme

MAINTENANCE

of the Football Field

THE fact that more and more school plants are being planned and operated on an all-year-round basis has thrust a greater responsibility than ever upon the shoulders of the athletic administrator.

For example, many a hard-surfaced court planned exclusively for tennis is now also serving as a basketball court, an area for mass drills, a parking lot for automobiles during games, and as a skating pavilion.

The great increase in facilities and the broadening of the program have served to intensify the maintenance problem, much to the bewilderment of many administrators. It is with the hope of alleviating their task that these tips on maintaining the outdoor plant are offered.

Football field. Wherever possible, the school should lay out a separate field for practice. This special practice field will greatly reduce the wear and tear on the main field.

Drainage frequently is a problem. The well-designed field is "crowned." That is, it is about 10 to 12 inches higher at the goal posts than at the sidelines. Accommodation is also made for the disposal of surface and sub-surface water.

If the services of an engineer are not available when planning a field, you may obtain helpful blueprints free of charge or for a small sum. This service is provided by many state colleges and several sporting goods firms.

A rain-proof tarpaulin is an excellent investment. Unfortunately, however, the cost is beyond the reach of the smaller schools.

A gridiron subjected to the wear and tear of from five to ten games a season is likely to show bare spots by Thanksgiving. The director, hence, must decide whether to re-seed in the fall or in the spring, or, as a last resort, whether to resod.

Those who seed in the fall usu-

By GEORGE T. BRESNAHAN

ally dress the soil with a layer of humus and rake thoroughly. They contend that they are adhering to nature's method of propagation. since plants drop seeds in the fall of the year.

In some localities, this seed germinates and gets a start before any killing frosts come along. In other regions, the seed lies dormant during the winter in wait for the first warm days of spring, thus gaining the advantages of an early growth.

Since the type of seed adapted to one field may not thrive on another and ranges from the temperamental bent grass to the rugged Bermuda grass, the wise director will avail himself of the advice of soil technicians.

Frequently this service is provided gratis by commercial firms engaged in selling seeds. In many states, the college of agriculture will furnish advice and, for a modest charge, provide an analysis of the soil of the playing field. The type of fertilizer, soil dressing, or "nurse" crop is usually recommended at the same time.

The favorable results obtained in controlling weeds by such formulae as 2-4-D have been well demonstrated.

Some groundkeepers incorporate eye-appeal by mowing the grass

GEORGE T. BRESNAHAN is track coach at the U. of lowa and co-author of the popular text, "Track and Field Athletics" (C. V. Mosby Co.). His current contribution is the first of two articles on the maintenance of the outdoor sports plant. This is a follow-up of his article on the maintenance of the indoor plant in the January issue.

both at an angle and in a reverse direction at each 5-yard line. For example, they may start at the north goal line, at an angle 45° to it, and mow in a southeasterly direction until the 5-yard line is reached. Next they will start at the 10-yard stripe and mow in a northeasterly direction until the 5-yard line is reached.

The mowing in opposite directions between successive 5-yard lines is continued until the entire field has been serviced.

A wet lime should be used in marking the sidelines and yard stripes. A dry line has a caustic effect on the eyes and skin.

Rubber numerals may be used to mark the 5-yard intervals at the sidelines. As a further aid to spectators, especially on fields where the fans crowd the sidelines, limed numerals three feet in height may be placed just within the playing area.

Any groundsman, with a little practice, can supply this added touch by means of a hand-operated wetlimer

Groundkeepers in those climates described as "temperate" or "hot," who have to depend on rain alone for soil moisture, should refrain from cutting the grass during late July and all of August.

Alert maintenance men always have a small amount of sod available with which to fill holes and replace worn spots immediately after every game.

Ths use of a heavyweight roller on sod fields is a questionable practice. The heavy roller may pack the soil too tightly to furnish a cushion for the tackled player; and may also produce a wavy top surface—giving an uneven underfooting. It is further contended that the packed top layer permits too rapid escape of the desired sub-surface moisture.

No doubt a plan may be worked out utilizing a moderate-weight rol-

(Concluded on page 36)

plit Second IMING BASKETBALL **VISITORS VISITORS** HOME **FOOTBALL** HOME DOWN TO-GO NADEN'S 8 PAGE CATALOG EBSTER CITY,

verse For north , and ection ched. -yard sterly

etions nes is d has

yard

ne is

ed to t the specre the d nuay be area.

mates 'hot," alone

little

ways vaild reafter

roller
prack the
shion
valso
iving
rther
top
pe of
ire.
prked
t rol-

ACH

35



ler that will level effectively without jacking.

Lighting. The floodlighting of the football field was well described in the January 1949 issue of Scholastic Coach. The maintenance of the lighting plant incorporates the painting of the metal structures and the protection of all exposed surfaces. Incandescent lamps are frequently removed and stored during the off-season.

Where electric clocks are installed on the scoreboard, care must be taken to insure an uninterrupted flow of current. Electric wiring and fusing should be adequate for the anticipated load. This need was perfectly demonstrated last season when a concessionaire, faced with an emergency, hooked electric plates and poppers to the electric service line. This unexpected load caused a blown fuse which put the electric clock out of commission.

Seating. Some schools employ a single set of bleachers—portable or "knockdown"—both for football and basketball. Where the directions of the manufacturer are followed explicitly and the human load is kept within the guaranteed bounds, this type of seating will prove acceptable.

All the V-braces, tie rods, and other safety braces must be utilized properly, and no safety factor should be omitted. This includes regular inspections by the designated engineer or supervisor.

The repair of the stands is another basic safety measure. If the stand is built of steel, the advice of

the manufacturer must be followed.

The wood seat-boards on either the concrete or steel stand require particular attention to keep them sturdy, splinter-resistant, and free of pitch-exuding knots. They should have visible seat numbers and be readily replaceable.

The availability of materials and their cost usually determine the kind of seats to install. We know of one case where redwood (untreated) withstood the rigors of temperatures of 105 F to —20 F for 21 years.

A wood preservative, however, is the usual treatment. When selecting the ingredients, the possible soiling effect on clothing must be considered.

Modern concrete grandstand construction includes an exterior finish which prevents seepage of rain or snow water. However, the expansion joints must be cleaned and refilled with cork and tar at fixed intervals.

Cement grandstands or stadiums with leaks or cracks or which otherwise exhibit signs of deterioration, may be rehabilitated through the application of a pre-tested commercial product such as "plastic rock."

"Plastic rock" adheres permanently to concrete, wood, or steel; wears unusually well, and is slipproof and fire-resistant. Packed complete in barrels, it may be quickly and easily applied and will protect the surface from the ravages of erosion.

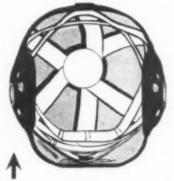
Next month: Maintenance of the baseball, track, tennis, and recreational areas.

Scholastic Intramural Tennis Tournaments

- Open to all senior and junior high schools in the U. S.
- No entry fee, no red tape attached to entering.
- Strictly intramural. Every school has complete and sole control over its tournaments.
- Free awards for winners of each of your tournaments. Free draw charts also furnished to every school.

TOP PROTECTION
For
Next Season





ned

f

70 00

1,

ES

This carefully designed, doubly reinforced inner suspension absorbs the force of every blow, practically eliminating serious injuries.

Give your players the Best with the Riddell Suspension Helmet

When you equip your boys with RIDDELL Suspension Helmets, you are giving them the best in head protection—a perfectly legal, perfectly fabricated headgear. This ultra-modernly designed helmet affords the most complete protection ever devised. An exclusively patented suspension prevents the player's head from touching the helmet at any point—thus distributing the shock of every blow evenly over the entire head and permitting a constant circulation of air. The RIDDELL Suspension Helmet is also stronger, more comfortable, lighter, and more attractive than the traditional type. It does not absorb water and takes vivid coloring better than any other headgear. That's why it is the top choice of colleges and high schools throughout the country.

Note how the suspension prevents the head from touching any part of the helmet—reducing injuries and permitting extra coolness.



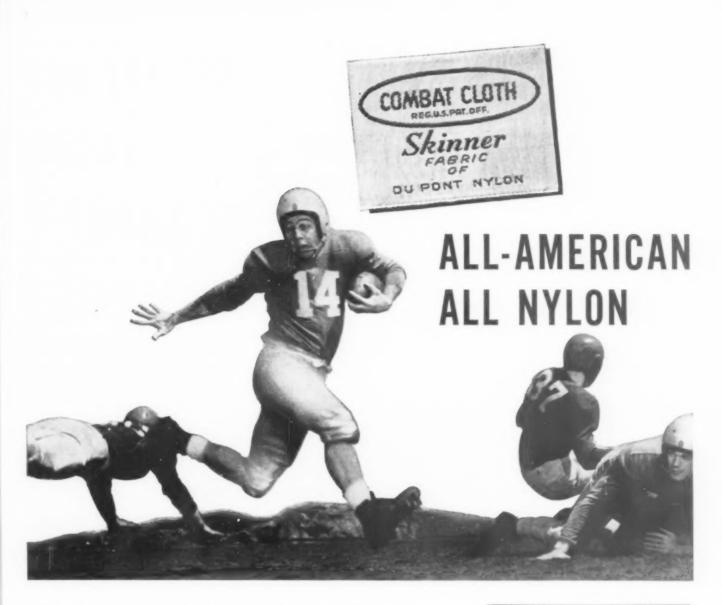
RIDDELL

THE HOUSE OF QUALITY AND SERVICE

1259 NORTH WOOD STREET, CHICAGO 22, ILLINOIS

OUTDOOR TRACK and FIELD RECORDS, 1949

	HIGH SCHOOL RECORDS	NATIONAL COLLEGE RECORDS	WORLD'S RECORDS
100-YD. DASH	9.4s. JESSE OWENS East Tech., Cleveland, O., 1933	9.3s. MEL PATTON U.S.C., 1948	9.3s. MEL PATTON U.S.A., 1948
220-YD. DASH	20.7s. JESSE OWENS East Tech., Cleveland, O., 1933	20.3s. JESSE OWENS Ohio State, 1935	20.3s. JESSE OWENS U.S.A., 1936
440-YD. RUN	48s. GENE COLE Lancaster, Calumbus, O., 1948	46.25. HERB McKENLEY Illinois, 1946	46.3s. HERB McKENLEY Jamaica, 1947
880-YD. RUN	1m. 54.4s R. L. BUSH Sunset H. S., Dallas, Tex., 1933	1 m. 49.8s. ED. BURROWES Princeton, 1940	1m. 49.2s. SIDNEY WOODERSON Great Britain, 1938
ONE-MILE RUN	4m. 21.2s. LOUIS ZAMPERINI Torrance, Cal., H. S., 1934	4m. 6.7s. GLENN CUNNINGHAM Kansas, 1934	4m. 1.4s. GUNDER HAAG Sweden, 1945
120-YD. HURDLES (3 ft. 3 in. hurdles)	14s. JOE BATISTE Tucson, Ariz., H. S., 1939 LEE MILLER San Antonio, Tex., 1947	13.7s. (3 ft. 6 in. hurdles) FRED WOLCOTT Texas, 1940	13.7s. (3 ft. 6 in. hurdler FORREST G. TOWNS U.S.A., 1936 FRED WOLCOTT U.S.A., 1941
200-YD. HURDLES (2 ft. 6 in. hurdles)	21.75. BILLY BLESS Jefferson, San Antonio, Tex., 1948	22.3s. (220-yd. course) HARRISON DILLARD Baldwin-Wallace, 1947	22.5s. (220-yd. course) FRED WOLCOTT U.S.A., 1940 HARRISON DILLARD U.S.A., 1946
HIGH JUMP	6ft. 71/sin. GILBERT LA CAVA Beverly Hills, Col., H. S., 1938	6ft. 11in. LES STEERS Oregon, 1941	6ft. 11in. LES STEERS U.S.A., 1941
BROAD JUMP	24ft. 11½in. JESSE OWENS East Tech., Cleveland, O., 1933	26ft. 8 ¹ / ₄ in. JESSE OWENS Ohio State, 1935	26ft. 8½in. JESSE OWENS U.S.A., 1935
POLE VAULT	13ft. 95/8in. JOHN LINTA Mansfield, O., H. S., 1939	14ft. 11in. EARLE MEADOWS U.S.C., 1937 BILL SEFTON U.S.C., 1937	15ft. 73/4in. CORNELIUS WARMERDAM U.S.A., 1942
SHOT PUT (12 lbs.)	59ft. 10%in. DARROW HOOPER North Side, Ft. Worth, Tex., 1948	58ft. %in. CHARLES FONVILLE Michigan, 1948	57ft. lin. (16-lb. shot) JACK TORRANCE U.S.A., 1934
AVELIN	219ft. BOB PEOPLES Classen, Okla. City, Okla., 1937	234ft. 3½in. BOB PEOPLES U.S.C., 1941	258ft. 2%in. YRJO NIKKANEN Finland, 1938
RELAY-440 YDS.	42.35. North, Des Moines, Ia., 1948	40.5s. U.S.C., 1938	40.5s. U.S.C., U.S.A., 1938
RELAY-800 YDS.	1m. 27.6s. North, Des Moines, Ia., 1948	1m. 25s. Stanford, 1937	1m. 25s. Stanford, U.S.A., 1937
ELAY—ONE MILE	3m. 21.4s. Hollywood, Cal., H. S., 1929	3m. 9.4s. California, 1941	3m. 9.4s. California, U.S.A., 1941
ELAY—TWO MILES	8m. 5.5s. Roosevelt, Des Moines, la., 1938	7m. 34.5s.	7m. 34.6s. California, U.S.A., 1941



• Now that you're in the market for next Fall's football gear, you'll find there is no finer fabric for your football pants than rugged long-wearing Skinner Combat Cloth. It's woven of all nylon to take tough punishment. The way it stands up under the most grueling play and finishes the schedule with flying colors

marks it as All-American. Its smooth, hard finish is frustrating to opposing tacklers. Brilliant, fast colors add glamor and showmanship.

Look for the Skinner label it's your assurance that the manufacturer of the uniforms spared nothing to give you the best.



THE QUALITY NAME THE CONSUMER KNOWS

FOUR SKINNER NAMES
THAT ALWAYS STAR IN
LOOKS AND PERFORMANCE

Skinner Combat Cloth*
All-nylon twill . . . fast colors,

Skinner "8217"*
Rayon satin face, cotton back
. . . all vat dyed.

Skinner Tackle Twill* A rayon and cotton fabric, vat dyed...water repellent.

Skinner Sunbak* Rayon satin face...100% wool back, Dry cleans beautifully,

*T. M. Reg. U.S. Pat. Off.



WITH PERSPIRING HANDS and loose grip you've already got two strikes on you. But with CINCH, the new liquid sports grip, you'll have a club full of home run kings . . . for in every sport where a firm grip counts, CINCH is right across the plate. Don't jinx yourself or your team when the answer's a CINCH.

CINCH comes in an economical team size tube. List price 75¢ per tube — packed 2 doz. to box. Get set for spring training and place your order now. You'll see the difference.

Coaches:

Write on your letterhead for a Free Sample Tube to:

CHEM PRODUCTS, INC.
50 STATE STREET, HARTFORD, CONN.

Foiled:

(Continued from page 22)

four (inside high land). The student sets the device into this engagement, takes his place in front of the mirror (imaginary opponent), looks himself over to check on his position from head to foot. He then extends his arm (aims), threatening the target with his blade point, and then lunges to reach the target; while at the same time, the forte (defense part of the foil) deflects the practice mirror foil out of position.

The student now carefully checks his position as a result of this lunge. He does this by looking straight ahead at himself in the mirror. After making corrections, he resumes the on-guard position and repeats this practice until he is satisfied that both his beginning position, as well as the resulting position of his movements, are correct.

Various offensive movements, as well as some of the defensive movements, can be practiced with this device.

The camera tilt top and pan head can be bought in a camera shop; the spring from a concern that specializes in springs; and the arm as well as the end plates that screw into the spring, can be made up in the school shop.

This device is highly recommended inasmuch as it inculcates the most important of all ideas—"To touch and not be touched while attacking." It teaches the boy to make the attack with his defense so set that he himself cannot be touched while making the attack.

This being but an introduction to the sport, I shall leave off here with the thought that a bit of interest has been created and that the possibility of doing something about learning without a coach is not out of the question.

In closing, let me say again that fencing calls for as much physical vigor and hence, condition, as all other sports. It is full of fast and ever-changing situations, calls for an abundance of quick wittedness, keen judgment, fine timing, and, yes, even endurance.

sli

ATTENTION, Directors of Summer Coaching Schools and Clinics

- Scholastic Coach is currently gathering the vital statistics on all the coaching schools and clinics that will be held this spring and summer.
- This information will be published in our regular Coaching School Directory in April, May, and June.
- We know you will want to have your school represented and we will be happy to furnish this service. All you need do is fill out the coupon below and send it to us.
- We realize that your plans may not yet be completed. Just send us as much of the information as you have, then relay the rest as it comes along.

SCHOLASTIC COACH, 7 E. 12 St., New York 3, N. Y.

ocation	Date
Director	Tuition
Address	
Courses to be given	
itaff	

The YANKEES join the GREAT TEAMS who use V-FRONT SUPPORTERS



property stands of the second

V-FRONT SUPPORTERS FOR YOUR TEAMS



CUP SUPPORTER. V-FRONT will not slip, sag or chafe - reduces time-outs and penalties. Extra-heavy 3-inch waistband. Built-in cushion for metal cup. Sunken snap on pouch overlap.



METAL CUP. Made of magnesium—the lightest and strongest metal cup ever offered. Will not break, bend, shatter or split. Ventilated for extra coolness. Scientific design and shaped edges provide extra protection—without need for bulging, old-style edge cushion.



TUXEDO. A de luxe 3-inch waistband supporter. Made with bleached, snowwhite, highly absorbent webbing, including knitted all-elastic mesh pouch.



TRUMP. V-FRONT Supporter with a 3-inch elastic waistband. All-elastic construction, including elastic pouch. A real value buy.

The New York Yankee Baseball Club uses and endorses the Johnson & Johnson V-FRONT Supporter—the new design that is being adopted by football, basketball and track teams from coast to coast.

Your own teams will appreciate the extra comfort and continued protection of these supporters. Note how the V-FRONT provides lifting action, keeps the pouch in place. The allelastic waistband follows body contours, fits constantly.

V-FRONT construction means comfort-in-action for every boy on every team you coach! TUXEDO and TRUMP V-FRONT Supporters are sold at drug and sporting goods stores. For further information on cup supporters, write to Johnson & Johnson, New Brunswick, New Jersey.

(For sprained or weak ankles, wrists or other athletic injuries, try ADAPTIC – the Johnson & Johnson elastic bandage.)

Johnson Johnson

V-FRONT SUPPORTERS

ORDER EARLY - ORDER EARLY - ORDER EARLY - ORDER

ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER

ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER

ORDER EARLY - ORDER EARLY - ORDER EARLY - ORDER

ORDER EA

ORDER E

ORDER EA

ORDER E

ORDER E

ORDER EA

ORDER EA

ORDER E

ORDER E

ORDER EA

ORDER EA

ORDER EA

ORDER EA

THE EQUIPMENT PROBLEM

Order Early and Your Manufacturer Will Give You the Equipment You Want When You Want It

Championship teams are not hastily thrown together in the fall. They are the product of longrange thinking and careful preparation. The same principle applies to top-drawer equipment. No manufacturer can equip your team as thoroughly and as attractively as you would like, unless you give him the time to do so. Special color schemes, fabrics, and sizes demand painstaking care and preparation. And to get exactly what you want at the time you want it, it is a wise idea to get your

the attractive but intricate color schemes you desire.

In short, the solution to the equipment problem is TEAMWORK-teamwork between the purchaser and the manufacturer. To carry out your assignment in this winning combination, ORDER EARLY. By doing so, you will assure yourself of super service in obtaining the finest equipment available for the price you want to pay.

TEAMWORK SOLVES

order in well in advance. That means NOW, Most of you know NOW what you will need next fall. By placing the bulk of your order early, you will assure yourself of prompt delivery. If you wait, you may lose out on the special details you want. Certain items may not be available, and the manufacturer may not be able to inculcate

ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER ORDER EARLY . ORDER EARLY . ORDER EARLY . ORDER Football coaches who demand the finest in

Custom Built Football Uniforms Protective Equipment

say O'Shea! Since 1918 —
over three decades—the name O'Shea has
stood for superlative style, quality, long
service and satisfaction in
custom tailored athletic wear.

NOW'S THE TIME TO ORDER!

Send your dealer your specifications now to insure delivery before the start of your playing schedule. NOW is the time to

SAY O'Sheas

Modern Design

Free-Action Functional Features

in a complete line of

JERSEYS

• PANTS • SHOULDER, HIP and KIDNEY PADS and OTHER ATHLETIC PROTECTIVE EQUIPMENT

O'SHEA KNITTING MILLS . 1860 N. WILMOT AVE. . CHICAGO 47, ILL.

Notre Dame Football-

the "T" Formation

by FRANK LEAHY

Director of Athletics and Head Coach of Football, University of Notre Dame

The famous coach explains his coaching methods and the strategy that brings him victories. The basic play of the "T" formation - Quick-Opener, End Sweep, Mousetraps, Fullback Lateral, End Around, and the forward pass - are all discussed in detail. The individual assignments of each player are explained in step-by-step maneuvers. Special chapters are included on protecting the passer, punt and kickoff returns, and pre-game warm-up. The execution of plays is illustrated with diagrams, drawings, and photos.

256 pages

51/2" x 81/4"

Send for your copy today!

Prentice-Hall, Inc.

70 Fifth Avenue New York 11, N. Y.

FREE BOOK that will help you TEACH BETTER TENNIS



Help your students play better tennis by sending for as many of these FREE booklets as you have tennis players in your school. Written by Vinnie Richards, outstanding figure in the tennis world — holder of 30 Championships. This booklet is based on Richards' own tournament experience illustrated with 36 fast action shots and photos of every grip. Mail this coupon now.

CLIP COUPON - MAIL TODAY

DUNLOP TIRE & RUBBER CORP., Dept. 72, 500 Fifth Ave., New York City

Please rush me____FREE Dunlop tennis books:
"How to Improve Your Tennis Game" by Vinnie Richards

Play DUNLOP Championship TENNIS BALLS

A Race **Every Four Minutes!**

RACK coaches interested in stimulating their larger meets may pan a nugget or two from the Comet Relays, the fastest growing meet in Iowa. Held annually in Charles City, the Comet Relays started three years ago with 11 schools, drew 18 the following year, and attracted 24 last year-the maximum number that can be handled under its unique set-up.

Some rather unusual methods are employed in this meet: (a) Every race, insofar as possible, is run as a real race and not merely as a timed heat; (b) Every school is given a good percentage chance of making a good showing; (c) All events are run off on a machine-gun schedule; and (d) A special set of events is arranged for schools just starting or renewing track.

These methods were evolved in an effort to get away from the faults of the conventional meet, which could be enumerated as follows:

1. Running a race against that mechanical rabbit—the stopwatch. This is frequently inaccurate, and irks both the contestants and the spectators, cheating the former out of a chance to actually race their rivals and leaving the latter in the dark about the final outcome until someone tells them over the loudspeaker what someone else saw on a stopwatch.

2. The percentage chance of winning in the usual relay meet is too low to stimulate interest in the sport. In football, basketball, and baseball, every team has a theoretical 50-50 chance to win. In the orthodox relay meet, the chances run from 10% down. Just what the percentage chance of success should be to best stimulate interest, is apparently an uninvestigated question. But it is obvious that the average boy will find it more encouraging to finish first in a group of six, than to finish seventh in a group of twelve.

(In last year's Comet Relays, every one of the 24 competing April 12, 1948

Dear

This year's Comet Relays, to be held on Friday, April 23, at 3:00 P.M., promise to be bigger and faster than any of the others. One of the features of last year's meet was the efficient way in which it was handled by our local corps of officials. We hope that just as efficient a group will be able to help this year, and we would appreciate it if you could be one of the officials.

Please fill in and return reply card at your earliest convenience. The meet should be over by 5:15.

Cordially, CLIFF BOYLAN

I (will) (will not) be able to act STARTER in the Comet Relays to be held on Friday, April 23, at 3:00 P.M.

Signed .

This duplex card is used to assure an abundant supply of officials. The upper part appears on one card, the lower part is filled out and returned.

schools scored at least 11 points, and four of the schools were section winners. If the meet had been run along conventional lines, about half of the schools would have scored just a point or two and only one or, at most, two would have captured class championships. The motivation engendered by a meet of the Comet Relay type, where every school is given an excellent opportunity to score and win a section title, needs no elaboration.)

3. Track meets tend to drag. 4. Newcomers in track are doubly handicapped by their own inexperience and by the fact that they must compete against not just one school but against many others at the same

To avoid the first two pitfalls, the Comet Relays thoroughly classifies

Address



\$1.00 POSTPAID

OFFICIAL BASEBALL GUIDE

The 1949 edition of the Official Baseball Guide contains complete major league averages, plus official averages of 58 minor leagues. Playing rules and all important alltime records are included.



50¢ POSTPAID

THE DOPE BOOK

Completely new issue of The Dope Book gives you impor-tant averages and "mosts" at your fingertips, plus special features including careers of major league managers and greatest teams of all time.



The National Baseball Weekly Offers 15% Discount to Coaches

FOR SUBSCRIPTION TO THE SPORTING NEWS

Coaches, players and fans of all sports make The Sporting News a weekly reading habit because of its sparkling features and "inside" stories. The Sporting News offers, in season, the special extra sections, "The Quarterback" and "All-Sports News" at no extra charge. Enjoy The Sporting News at your home or school office at special coaches' rate of 15 per cent discount from the regular yearly rate of \$8. Total cost with discount is only \$6.80. only \$6.80.



\$2.00 POSTPAID

BASEBALL REGISTER

Brand new 1949 edition of the Baseball Register con-tains complete playing facts, figures and personal data about the Game's "400," in-cluding Hall of Fame immortals. Also, the thrill-packed feature, "Ten Great-est Rallies of All Time."



\$3.00 POSTPAID

THE REAL BABE RUTH

For the first time, THE REAL BABE RUTH gives the intimate story of the Game's most colorful figure, told by the famous New York writer, Dan Daniel, who traveled with and knew the Babe throughout his career. Plus companion feature, "I Remember Ruth." a series of anecdotes by H. G. Salsinger of the Detroit News. More than 100 photos. than 100 photos.

Special Offer to Coaches

CHARLES C. SP 2018 Washington Ave 5t. Louis 3, Mo.		SON	
Enclosed is check of \$ for lowing:			
OFFICIAL BASEBALL GU	JIDE @ \$1.	.00 postpaid	
BASEBALL REGISTER @	\$2.00 pos	stpaid	
THE DOPE BOOK @ 5	Oc postpaid	d	
THE REAL BABE RUTH	@ \$3.00	postpaid	
THE SPECIAL	OFFER T	O COACHES	
of 15% discount for tion of one year at price \$6.80			
Name			
School			
Address			
City	Zone	State	





Produced in collaboration with

JIMMY DYKES and HOLLIS THURSTON, Coach, Hollywood Baseball Team and supervised by NORMAN SPER



THROWING IN BASEBALL-Demonstrates overhand, three-quarter, sidearm, and underarm throws. Clarifies and explains effective throwing stance and proper grip of the ball.



CATCHING IN BASEBALL-Illustrates the effective techniques for catching the thrown ball, high-batted ball, and ground ball. Stresses body position, relaxation, balance.

Here are three vital, comprehensive coaching tools that drive home the allimportant fundamentals of HITTING, THROWING, and CATCHING IN BASEBALL.

Professional players directed by majorleaguer Jimmy Dykes demonstrate basic skills that must be mastered . . . grip of ball and bat, stance, balance, coordination. Slow-motion photography, closeups, and superimposed drawings make minute details and complicated plays easy-to-understand, easy-to-follow.

Whether you coach a grade-school nine or a college team, these three EBFilms provide you with forceful, authentic, time-saving aids for teaching fundamentals . . . while emphasizing your own baseball techniques. You'll use them, too, for review or rainy-day schedules . . . and your players can run them for their own sessions. Arrange to see a preview now.

Other EBFilms on Athletics

Plan to see these related EBFilms. Titles include: Dashes, Hurdles, and Relays: Distance Races; Weight Events; Jumps and Pole Vault; Ball-Handling in Football; Blocking in Football; Tackling in Football; Ball-Handling in Basketball; Defensive Footwork in Basketball; Shooting in Basketball

the competing schools. Since there are six lanes on the Charles City Track, six schools are placed in each of four classes. The six biggest automatically go into Class A, the next six into Class B, the next six into Class C, and the six with the least track experience into the "R" or renewal class.

jun

sect

pain

eacl insc

wri

tim

the

is th

time

wat

and

first

ther

han

ther

ule

coac resp

the 6.

assu

cial:

duti

mee

sent

inst

fore

the

ten

inst

ROST

T

clud

cler

COUL

nou

plac

plac

stati

6 as

sista

mes

R"

SIX

this

first

low:

men

no i

and

almo

rolle

leen

lon

ear

lee!

V

lass

Tien est

conti

cori

the

Live

To

A

5.

4

In the longer races not run in lanes, two or more of the classes are combined.

So well did this work out last year that only one senior high race -the low hurdle shuttle-had to be run on a time basis. What's more, every one of the 24 schools competing in the meet entered the scoring column.

OFFICIALS CORPS

Every meet, to eliminate "drag" and assure a machine-gun schedule, requires a sufficient and capable corps of officials. The Comet Relays depends largely upon the cooperation of a group of 50 Charles City professional, business, and school men. These volunteer officials have come to take great pride in their ability to run off the meet in snappy fashion.

These time-savers are also employed:

1. All six field events are started at the beginning of the meet.

2. Prelims in the individual running events are avoided by allowing only one contestant from each school to compete in each event.

3. All starters report at the head of the chute to the assistant clerk who places them in their lanes, rotated if necessary, and then sends them during the previous race directly to the places from which they will run. Here the clerk or relay station master checks their positions and flags the starter that all are ready.

In this way, one race may follow another just about as fast as the starting blocks can be set.

The meet schedule allows two minutes for this and for practice starts. The dashes and similar races are set three minutes apart, the mile relays at seven-minute intervals. and the two-mile relays at 12-minute intervals.

Last year, when it became necessary to run an extra two-mile relay, the meet ran 15 minutes behind Altogether, between 3 schedule. P.M. and 5:15 P.M., 32 events were run off, as follows: three highhurdle races, three 220-yard relays. seven 100-yard dashes (including two junior high prelims), three mile medley relays, two two-mile relays, seven 440-yard relays (three for

ENCYCLOPAEDIA BRITANNICA FILMS INC.

junior high), four low-hurdle relay sections, and three mile relays.

- 4. Judges and timers work in pairs. Each pair is given a card for each race with the entries already inscribed. After the race, each judge writes in the place winners and the timer puts in the time (merely for the coaches' convenience). The card is then handed to the head judge or timer. The head judge, who has watched the race for close finishes. and the timer, who has helped pick first place, check the cards and turn them over to the scorer.
- 5. All drawings are made beforehand by the referee, and copies of them together with the time schedule are posted and given to each coach. The coach alone is made responsible for getting his boys to the assistant clerk on time.
- 6. Every effort is bent towards assuring the appearance of the officials and informing them of their duties. At least a week before the meet, return reply postcards are sent to the possible officials. Written instructions follow three days before the meet. Then, as a final check, the officials are gathered for at least ten minutes before the meet for final instructions from the referee.

ROSTER OF OFFICIALS

The complete roster of officials includes: 1 referee and starter; 1 clerk of course; 1 assistant clerk of course; 1 scorer; 1 recorder; 1 announcer: 1 head finish judge and 6 place judges; 1 head timer and 6 place timers; 4 inspectors; 3 relay station masters; 6 field judges and 6 assistants; 1 marshal and 6 assistants; 10 hurdle shifters; and 4 messengers.

Another unusual feature is the "R" or renewal group. Each year six or more schools have entered this group, and last year for the first time several members of the lowa B group (less than 100 enrollment)-who are supposed to have no interest in track-participated, and one of them. Orchard, scored almost a point for every boy enrolled in school.

To date, the field events have leen unclassified, with the excepon of an "R" class high jump last ear. We realize, however, that the neet could probably be improved y running the field events in lasses or, better still, by putting tem on a team basis-adding the est marks of the top three or four Ontestants from each school, then Foring each event on the basis of he aggregate scores. This would rive the field events a relay touch.

3

e

S.

20

"Riflery is a big thing with us,"

writes CAPT. EDWARD C. KENNEY McDonogh School, McDonogh, Md.





Scholastic Publications 7 East 12th Street New York 3, N.Y.

Dear Sirs:

Riflery is a big thing with ust McDonogh School is semi-military and has a uniformed corps of cadets who receive five weeks of wespons training in their regular schedule; so you can see that safe and proper handling of fire arms is considered an experience that will be beneficial to all cadets and teach them exhibits they will enjoy for years to come. In addition about skills they will enjoy for years to come. In addition about skills they will enjoy for years to come. In addition about skilty boys have selected rifle shooting as an activity, and with all this enthusiasm it looks like a benner year.

Most of our shooting is done here at school on our own ranges where we run our intra-mural league. Our club is a member of the junior N.R.A. and engages in postal matches and national shoulder to shoulder meets. The highlight of our season last year was our participation in The National Scholastic Rifle Tournament to which we are looking forward again this year.

Our club rifles are all Remington "Matchmasters" - Model 513T - and many of the privately owned rifles are of this same model. Which the boys and I feel are accurate and easy to handle. We have about thousands of rounds of ammunition stready this year and all of it has been Remington.

Here's a note of praise to Remington!

Sincerely yours,

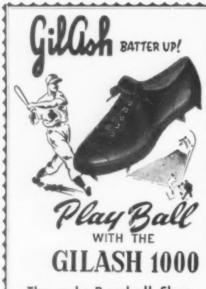
Edward C Kenney

Edward C. Kenney Captain, Inf. Res. McDonogh School Jr. Rifle Club

Remington will help you plan the organ- ment, marksmanship, target shooting, ization of a rifle club and the building of a range. As a starter, we shall be glad to send you, free, an interesting, fully illustrated booklet containing instructions on the operation of a rifle

the construction of rifle ranges, and many other subjects of practical value. Just fill in the coupon and mail it to Rifle Promotion Section, Remington Arms Company, Inc., Bridgeport 2, Conn.





The only Baseball Shoe with a PATENTED TONGUE

Write for catalogues on our other Baseball as well as TRACK SHOES

Ask your Dealer to send for samples. Or, we will send Direct at 33 1/3% off.

George Gillis Shoe Corp. FITCHBURG, MASS.



Give your track men a chance to win by providing a starting block which assures them of a quick, sure getaway. The new Mercury Starting Block points the way to championship by muking certain a perfect start.

There is no slipping of the block when the contestant lunges forward, thanks to the surehold track grippers. There is no slipping of the foot, thanks to the rough basket-weave surface against which the runner's feet rest.

THE MILLER COMPANY

Hal Schumacher on Pitching

(Continued from page 11)

plete without some stress on the fielding of the position. A good fielding pitcher is a distinct asset to the defense—a sort of fifth infielder.

Many fielding difficulties stem from a poor follow through in the delivery. As previously stated, the pitcher should always finish his pitch with both feet parallel to each other, ready to move in any direction.

A lot of boys finish way off balance, with their weight thrown heavily on the left foot. As a result, they have practically no chance of fielding a ball hit to their right. The coach should stress the importance of finishing up with both feet parallel to each other and the body in a crouch, ready to go left or right with equal facility.

In fielding a bunt, the boy should plant his right leg solidly and make the play with both hands whenever possible. If he has time, he should straighten up and make his throw with a regular step from a balanced position. On close plays, the pitcher must be able to make a snap throw from the ground without

straightening up.

Balls hit to the left side provide the pitcher with his most difficult play. The pitcher should never take for granted that the ball will go through for a hit. There is always the chance that the first or second baseman will come up with it. For this reason, the pitcher should always break for first on all balls hit to his left.

The idea is to start toward a point on the foul line a short distance from first, then angle off so that you're running parallel to the line and runner. This will prevent the pitcher from obstructing the runner or crashing into him on the bag.

I distinctly recall a sad experience in my first game in the major leagues. I was pitching against Boston. With two out and a man on first, the batter drove a grass-cutter between first and second that had "hit" labeled all over it. I was positive that the ball would go through and made just a half-hearted start toward first.

Terry, at first, couldn't get to the ball, but Critz, our second baseman, made a great stop. Thanks to my slow start, I didn't get to the bag in time and the runner was safe. The lesson was driven home forcibly when the next man up hit the ball out of the park.

Another bad fault of many pitch-

ONE of the greatest pitchers in the history of the N. Y. Giants, Hal Schumacher served 13 years in the big time-all with the New York club. As a member of the famous Big Four of Hubbell, Schumacher, Fitzsimmons, and Parmelee, "Prince Hal" pitched in three world series and one All-Star Game (1935). Among other outstanding achievements, he pitched seven shutouts in 1933, won 61 games between 1933-35, and established a league record for most home runs by a pitcher in one season (six). Schumacher is a graduate of St. Lawrence U. and served in the Navy during the war. At present he is vice president in charge of sales and promotion for McLaughlin-Millard, Inc., manufacturers of the Adirondack line of bats.

ers is hurrying the throw, especially in double-play situations. On balls hit back to the pitcher with a man on first, the pitcher should field the ball and take a step toward second base for the throw. He should not rush it too much or throw from an awkward position.

Remember, you can't get two men until you first get one. Let the second baseman or shortstop do the hurrying for the second man.

Another thing: Make the throw so that the man covering gets the ball in position (letter high preferably but never below the belt) to get the ball away quickly to first.

One of the best ways of learning how to field is to participate in a lot of good pepper games. It isn't necessary to throw the ball with a regular pitching motion. The main idea is to wind up in a balanced position ready to go left or right. In time this will become habitual.

Carl Hubbell and I were ordinary fielders until Freddy Fitzsimmons came along and introduced us to



● BASEBALL-75c & \$1.50 ● BASKETBALL-\$1.50

SOFTBALL—75c & \$1.50 • BOWLING—\$1.00

Scoring Areo—10"x14" • Best Construction
Two-Color Cover • Stiff Back, Spiral Bound

Two-Color Cover Stiff Back, Spiral Bound Sold by leading Sporting Goods stores or Send money order—Dept. C-3.

WELLS PUBLISHING CO. . LEONIA, N. J.



5

16

ie u le

to

ot

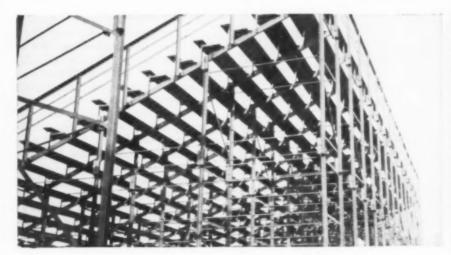
5-11

n 15 Intercel - insulates against cold or heat

Two-tone Suede Side Style 2214. Reversible 24-oz. Morgan Suede in two-tone effect, with silk beading along sleeve seam, around shoulders, and pocket piping. Reverses to finequality, water-repellent cotton twill Heavy wool-mixed knit collar, cuffs, and Style 1983. New! Outstanding! Sensational! Reversible two-tone satin on one side; reverses to quilted satin, insulated with 10-oz. Intercel—the perfect insulator against cold or heat. Exceedingly attractive. Available in choice of

Write for name of nearest dealer

WIN SPORTSWEAR CO. ST. PAUL 1, MINNESOTA



Here you see construction detail on a 10,000 seat Williams Steel Portable Stand installed at the Indiana University football field for excess crowds. Welded construction, no loose bolts or connections. Two workmen can handle any section with ease. This stand is designed and built sectionally so that it can be used in the field house during the basketball season.

Williams construction is SAFE, ingenious and roomy. Whether your requirements are simple, or complicated, call in Williams first. You'll save time and money. We can guarantee delivery of stands for the football season if you order NOW.

WILLIAMS Steel GRANDSTANDS

PORTABLE - PERMANENT INDOOR - OUTDOOR FOLDING - ROLLING

7his 50 Row WILLIAMS portable GRANDSTAND leads a dual life FILL IN . TEAR OUT MAIL! WILLIAMS IRON WORKS, INC. 430 East 102nd St., New York 29, N.Y. Gentlemen: Send me your new FREE grandstand catalog. My name



this pepper drill. It improved our fielding 100%.

Young pitchers should not fool around with freak deliveries like the screwball and slider until they have mastered the basic pitches—fast ball, curve, and slow ball. The freak pitches are hard to control and very tough on the arm. A boy may overdo it and hurt his arm permanently.

Another thing to emphasize with schoolboy hurlers is the necessity of holding the ball the same way and throwing every pitch with the same motion, except for a cross-fire, of course. Otherwise an observant coach will steal the pitch.

Every boy should also be watched for little idiosyncracies that give away the delivery. For example, I know a pitcher who looks at the ground before throwing his curve ball and looks straight ahead for his fast ball. The danger is perfectly obvious.

f

re

fe

a

h

fu

fe

le

n:

of

cl

h

re

he

th

gi

h

ga

Ca

gl

of

se

qu

th

pl

or

gi

of

De

There is no standard way of gripping the ball. The best advice is to hold the ball in the most natural manner—either with or across the seams. The fast ball and the curve are gripped identically; a different grip is needed for the change-up pitch. Some pitchers like to "knuckkle" the ball for the change-up; others use a palm ball.

PALM BALL PITCH

As the accompanying picture shows, I employed a palm ball. The ball is pushed back in the palm of the hand and gripped fairly tightly. It is thrown with the same wind-up and motion as any other pitch. This is very important. The big mistake is to over-exaggerate the motion to lend the impression that the pitch will be a fast ball.

In conclusion, I would like to stress the importance of pre-season conditioning. The legs should be strengthened by running and the wind improved by short wind sprints (after the legs have been conditioned).

Two great pitchers, Walter Johnson and Adolf Luque, considered their legs so important that they always devoted the first week of spring training to running. They made no attempt to throw during this time. They worked on the theory that if the legs were in shape, the arm would condition itself naturally.

How hard should the pitcher throw the first few days of training? This should be left to the individual. Carl Hubbell used to amaze everyone by the amount of stuff he put on the ball in his early pre-season

workouts. However, that was natural for Carl because of his free and easy delivery.

11

ol

ke ey

1e

ol

)у Г-

th

of

nd

ne

of nt

ed ve

I .

ve

is

ly

p-

to

ral

he

ve

ent

up

k-

ip;

ire

he

of

lly.

·up

his

ake

to

tch

to

son

be

ind

een

nn-

red

al-

of

hey

ing

the

in

11-

her

ng?

ual.

ry-

put

ison

The best solution to this problem would be to throw hard enough to loosen the winter kinks but not hard enough to strain the muscles or ligaments. The individual is the best judge of the tempo best suited to his arm.

Confidence is a great asset. The pitcher should believe in himself and his ability. Doubt creates uncertainty, and the uncertain pitcher has two strikes against him before the batter steps to the plate. Above all, "don't walk 'em, make 'em hit."

Relay Conditioners

(Continued from page 7)

Relays are good media for overcoming the track version of stage fright. Often a leadoff man on a regular relay doubts his ability to equal the times of the anchor man, while the "also-ran" individual performer looks with unwarranted awe at the man who stars at his distance.

These attitudes foster inferiority complexes, create mental blocks that hinder self-improvement. Relays furnish the psychological situations for the alert coach to instill confidence.

Recently, an unranked sprinter found himself running the anchor leg of an improvised 440 relay against Jim Ryan, our Jr. Met. (New York) sprint champ. In individual races at 100 yards, the novice had never finished closer to Ryan than 12 yards.

But when this lad was touched off with a six yard lead, with the cheers of his teammates ringing in his ears and a feeling of personal responsibility for his team's honor, he became inspired. He finished with the same six yard advantage he was given at the start. More important, however, was the confidence he gained from this moral victory. It carried over to his individual performances.

Similar cases are legion. Men who can't exert themselves for personal glory, poop themselves for the honor of the relay team, thus curing themselves of inferiority complexes quicker than a dozen lectures could ever effect.

Because relay workouts are shorter than regular training sessions, the practice session may be completed more quickly. And the hour or so earlier the boys are released gives them a terrific lift. It is a sort of unspoken reward for merited performance.



FIRST CHOICE-YEAR AFTER YEAR

"KANTLEEK" Bladders, used in most official footballs, are the *first choice* of manufacturers, coaches and players. Specially shaped to conform to the ball casing, they are compounded to withstand great and sudden pressure. Tough and long-living, these bladders have the patented all-rubber "KANTLEEK" valve—positive

assurance against loss of air!

FINEST QUALITY SINCE 1877

*Patented

THE SEAMLESS RUBBER COMPANY
NEW HAVEN 3, CONN., U. S. A.





Boost Gym Interest to New Heights with TRAMPOLINING By NISSEN

NISSEN—Creator of
America's First
Standard
TRAMPOLINE*
founded the active,
bounding sport of
TRAMPOLINING



Nissen Trampolines trained World War II flyers and paratroops. Nissen Trampolines have won thousands of fans in AAU-sanctioned gym competitions and EXCLUSIVELY
NISSEN
Flashfold 48-T
TRAMPOLINE
Lighter—Larger
ONE MAN FOLDS
IT! ONE MINUTE
DOES IT!

in university, college, high school and Y ranks. WRITE FOR FREE LITERATURE and PRICES.

NISSEN TRAMPOLINE

200 A Avenue NW Cedar Rapids, Iowa



and Outdoor Models

*Name TRAMPOLINE Reg. U S. Pat. Off



OCEAN POOL SUPPLY CO., 1140 BROADWAY, NEW YORK CITY 1

The coach clocks each relay's time. He correlates performances by making allowances for handicaps, running starts, and order of finish. These results are posted for all to see and for all to compare. Invariably, all members look forward to improving their performances in the next relay workout.

The rest periods between races, golden moments, are fully exploited. While memories are still fresh and minds are receptive, praise is allotted and mistakes pointed out. Finer techniques are explained. Encouragement is given. When the athletes repeat, they practice what they learn—or unlearn—during the rest period.

The Pioneer Club runs its relay workout in the following order:

Reg	m	la	17	7	6	lo	ij	1:	8			Distance
												440 or 880
												440 or 880
two mile												880 or mile

Improvised relays Distance

Sprinters, broad jumpers, hurdlers, high

jumpers 440, 880, or 1200 yds.

440 and 880 men 880, 1200, or mile Distance men . . 1200, mile, and 2 miles

By the time the distance men have concluded their relays, the regular 440 relay men have rested and are ready for a second stint. When the time comes for the distance men to run their second relay, they also are well rested.

Any combination of distances run in the relay workout may be used in any division. In the early stages of training, Pioneer men run both races over the longest distance scheduled for their group. At the height of condition, they run the first race over the longest distance; the second over the shortest. The distances run always depend upon the condition and needs of the athletes.

Just before the second race is run. mistakes made in the first race, if any, are corrected. We don't stress stick passing to the improvised relays as religiously as we do to our regular quartets. But we stress all the other fundamentals to all.

Once the stick has been passed, a relay race is not much different than any other race. Our athletes are instructed to relax, how to coast, coordinate movements of arms and legs, maintain form throughout, avoid being boxed, to pass on the straightaway or coming off the turn, and never, never, to pass on the turn.

Sound, workable knowledge of technique is not really mastered unJOE YANCEY coached the 1948
Jamaica Olympic Team which
included Arthur Wint and Herb
McKenley, and has been coaching the famous N.Y. Pioneer Club
since 1936. Last year he won the
N.Y. Track Writers' Award for his
efforts in developing and encouraging amateur athletes. Cliff
Goldstein, a former City College
of N.Y. distance star, captured
the Junior National AAU 5000meter title in 1943 and the Senior N.Y. AAU three-mile crown in

ne.

ık-

ın-

ese

nd

all

ing

av

es

it-

esh

is

ut.

n-

the

hat

the

lay

80 nile

S.

iles

ave

lar

are

the

to

are

run

sed

ges

oth

ed-

ght

ace

ec-

lis-

the

th-

un.

, if

re-

our

all

d, a

han

in-

co-

and

out.

the

irn.

the

of

un-

til it has been worked into the athlete's thinking. We encourage our men to master the fundamentals of running so that they can criticize one another. Our men really practice the freedom of criticism after our relay workouts. They also respond to it profitably.

That's the system the Pioneer Club uses once a week in its relay workouts. Even when inclement weather, pressure of studies, et al., cause a poor turnout, all present compete. We improvise medley relays with odd men. If necessary, we team up individual stars to compete against the regular relay quartets.

Our versatile practice system has produced many top U. S. trackmen. Larry Ellis, former New York schoolboy mile champ; Bill Lucas, now a Manhattan College freshman distance star; and Frank Effinger, of Andover, were just schoolboys when they won summer honors with the Pioneer Club.

In the college and AAU ranks, Reggie Pearman, Hugh Short, Eddie Greenridge, and Tom Carey conditioned themselves into top form in our relay workouts.

In summary, the relay workout:

- 1. Gives all a chance to compete.
- 2. Tapers off the week's work.
- Adds variety; stimulates interest.
- 4. Provides for repeating in short sessions.
- 5. Offers baton passing practice under competitive conditions.
 - 6. Builds esprit de corps.
- 7. Allows handicapping without making athletes conscious of handicaps as such.
- 8. Precludes athletes becoming stale or over conditioned.
- 9. Builds a reserve of manpower that can be substituted for ailing regular relay men.

With a chance to witness his athletes competing in several different relay events, the coach often discovers "a four leaf clover he overlooked before."

DZŽŮTE GYM MAT FELT

Your
assurance
that the
Gym Mat
you order



SAFE Guaranteed 100% free from broken needles or other foreign matter. OZITE all-hair felt is thoroughly cleaned and sterilized.

RESILIENT Gym mats filled with genuine OZITE hair felt stay resilient longer. The laminated construction makes a firm, yet springy cushion that protects students and athletes from injury.

DURABLE OZITE Gym Mat Felt will not bunch, spread or pack down—will stand up under hard usage and retain its cushioning qualities throughout the life of the mat.

ECONOMICAL OZITE Gym Mat filler lasts longer because the nair fibre is practically indestructible. Its springy comfort, its long-lived economy and absolute safety make it the best buy.

Specify OZITE Gym Mat Felt as the filler the next time you order mats for tumbling, boxing, wrestling, or bumpers in the gymnasium. For more details write to Dept. P-93.

AMERICAN HAIR & FELT COMPANY

MERCHANDISE MART, CHICAGO 54

Certified
"OZITE" FILLED
GYMNASIUM
MATS

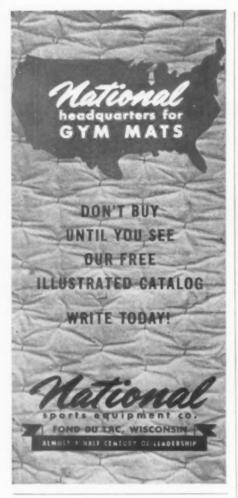




Atlas "Certified" Mats are the finest that can be produced for all kinds of gymnasium work. Filled with genuine, needle-free OZITE. Square cut edges, closely tufted with triple-knotted, waxed seine twine. Available in 1", 2", 3" thickness, in two quality duck covers, to any size you specify. Used in colleges, high schools and clubs throughout the country.

New catalog No. 12 describes and illustrates equipment for Baseball, Football, Basketball, Boxing, Gym and Field, etc. Write for it today!

ATLAS ATHLETIC EQUIP. CO., 1240 S. Seventh, St. Louis 4, Mo.



Five Star Track Score Cards and Screening Device



FIVE STAR grades the individual in the 100, 880, Shot, High and Broad Jumps. A Special Formula ther enables you to assess the potential worth of each boy in the eight other events.

FEATURES . . individual achievement record . . . helps Coach select best event . . uncovers latent ability . splendid motivation for Fall and Spring PHYSICAL EDUCATION Classes . serves as a feeder for varsity squad members.

Instruction and Summary Sheets with each 100 card order. Postpaid. 10% Discount allowed for payment

100 CARDS @ \$4.00 PER 100 500 CARDS @ \$3.50 PER 100 1000 CARDS @ \$3.25 PER 100

JOHN T. CORE

1224-C W. Broad Street, Richmond 20, Virginia

'Acclaimed at the N.C.A.A. Convention "CALIFORNIA COACH" SLACKS Specifically Made for P. E. Directors

stom tailored to your measurements. 100% re Wool Grey Flannel. Pockets and Cuffs it wear longer. Belt loops hold better.

JOHN J. FOX
P. O. BOX 806 BEVERLY HILLS, CALIF.
Send for Samples and Prices

Attention Mr. Coach

EARN \$3000.00 COMING SUMMER VACATION

NO SELLING OR CANVASSING

Write for full details now

GILBERT & COMPANY 208 Eleventh Ave. So., Minneapolis 15, Minn

Press-Coach Relations

ITH school sports continually growing in popularity and with communities playing an increasingly larger role in the administration of the program, the need for intelligent press-coach relations is more vital than ever be-

A good press does three important things: (1) It stimulates the gate receipts, (2) exposes the program to public scrutiny, and (3) greatly enhances the personal prestige of the coach.

How may a good press be obtained?

First of all, there is the local newspaper. In most towns, the sports editor or the chief columnist is intimately acquainted with the high school coach. That, so far as it goes, is exceedingly satisfactory. But what happens when the handouts from the coach become a bit stereotyped?

ANGLES AND LEGWORK

An enterprising sports columnist, if he is interested enough in the school sports program, will go out and dig up new angles. The average small-town columnist, however, is too busy to do his own legwork, and the chances are that he will turn to something else.

Hence the wise coach will dig up fresh angles for him. Human interest stories are always welcome. Every player on the squad has one or more personal stories and it will pay the coach to ferret them out.

Short bull-sessions with various players will produce a lot of usable copy. The coach can retell the stories to the sports columnist or write them up himself in the form of releases.

The hobbies of the players are particularly newsworthy. Many a grid hero likes to build model airplanes or enjoys collecting rare coins or stamps. While these hobbies may not have anything to do with sports, they do make interesting newspaper copy.

Today the female of the species is every whit as important as the male in the high school sporting scheme of things. Copy concerning girls' basketball teams, baseball aggregations, and bowling groups is nearly as acceptable to the sports editor as the more prosaic items.

Also newsworthy when handled properly are the comparatively little exploited sports such as archery, bowling, badminton, ping-pong, fencing and swimming.

A good, large, assorted picture file comes in very handy. Too often the entire file of a high school coach will consist of some action shots of big games and a handful of individually posed shots of key grid or hoop luminaries.

It is quite simple to build up a good file. Any commercial photographer will be happy to spend a few hours at the school field taking action shots of first and second string members. In all probability, he will be able to sell duplicates to the players or to their parents.

With a good picture file at his disposal, the coach can furnish the local papers will all the pictures they need.

The local theatre is another good bet for picture displays. The average theatre manager is ready, willing and distinctly able to furnish lobby space for a display of glossy photos of high school sports and players. A spread of this type can be made up every month for display purposes.

OPEN HOUSE FOR PARENTS

And speaking of unusual methods of enhancing public relations, why not make it a practice to hold an Open House for parents every season? This Open House might consist of a banquet for all the players, with the parents as guests.

Motion pictures of the high school games will provide excellent entertainment at this affair, and after the banquet the coach may spend a lit-

tle time with each parent.

Such personal contact at quarterly intervals is highly desirable. Parents like to know what kind of men are handling their youngsters LIN

ting ning ags is orts lled

litery, ong,

ure ten ach s of dior

p a

06few ac-

ing vill the listhe res

boo

er-11ish ssy nd an is-

hy an anrs, ol

ds

10 t-

of

Hillyard Products and Maintaineers Protect Your Floors Year after Year!

★ Super SHINE-ALL...

A neutral chemical cleaner—not a soap—does not have to be rinsed

★ HIL-TONE . . .

A floor dressing—not a greasy floor oil. Leaves a protective cooting

★ Super HIL-BRITE . . .

Highest quality wax—self-polishing—self-leveling—non-brittle—made from No. 1 Carnauba

★ WOOD PRIMER . . .

A penetrating seal that water proofs wood floors and prevents breaking down of cell structure

★ Star GYM FINISH...

Our No. 1 gymnasium finish which is serving thou sands of schools and public and private concerns

* ONEX-SEAL ...

A marvelous water and weatherproof seal for terrazzo, tile, marble, slate and cement floors.

* HILLYARD "MAINTAINEERS"

are a nation-wide organization of floor treatment experts Advice and recommendations given without obligation



STEELTONIAN . . .

SEND FOR FREE BOOK

Send for the free Job Specification book. Full of helpful

HILTONIAN . . .

Electric twin-brush scrubbing, polishing and waxing machine. A model for every purpose. 16-inch, 19-inch and 22-inch.

DISTRIBUTORS FOR

HILLYARD CHEMICAL CO., ST. JOSEPH I, MO.

BRANCHES AND WAREHOUSE STOCKS IN ALL PRINCIPAL CITIES

THE DIFFERENCE SHOWS UP ON THE SCOREBOARD!

No Bats Are Made Better... None Can Perform Better

- * Finest Bat Stock Available
- ★ Air Seasoned Exactly Right
- * Perfectly Balanced
- * Finished To Give That Professional Bone-Rubbed Feel*

"It's the hest

bat made at

SOUTHWEST LITTLE ROCK, ARK. P. O. BOX 2339

*Arkansas Travelers only.

1 See Them! Heft Them! At Better Dealers Everywhere!



Talk about





You can have a fast-breaking team . . . or take it slow across the center line. But once you're down in the scoring zone, fast action is essential,

There's another angle on "fast-action" too . . . fast-action is important in getting sprains and bruises, charlev horses and sore muscles relieved, so your bench won't be cluttered with "slow-action" stars.

And here's the practical answer . . . it's the new fast-action Antiphlogistine Rub A-535.

Rub A-535 is fast-acting and effective in relieving muscular aches and pains, sprains, wrenched muscles, chest cold misery . . . and many other conditions that impair the efficiency of your players.

See that every member of your squad has a tube or a jar for handy self-application. Greaseless, won't stain clothes.

Order from your regular supplier

Antiphlogistine



The Denver Chemical Manufacturing Co., Inc., New York 13, N. Y.

CUSHION SOLE

\$ 555

FOR ACTIVE SPORTS!

The resiliently woven velvet-soft cushion puts "spring" in every step velvet-soft cushion puts "apring" in every step ... something really new in elastic-top socks. Ready to go any time, all the time—wear Qualitex woolly Nylons for your favorite active sports, for business, and for dress, Wear 'em and be dress. Wear 'em and be foot-happy all day long

MADE 100% OF SPUN DU PONT NYLON GUARANTEED! OUTWEARS

WOOL 6 TO I

Look and feel like finest virgin wool,
shrink-proof, moth-proof, moisture absorbent and almost impossible to wear
cut. We recommend their use by your
sports teams.

Postpaid with Check or Money Order-Postage Extra with C.O.D. QUALITEX MFG. CO., 1706 Beury Bldg. 3701 N. Broad St., Phila, 40, Penna.

Dow-Metal Crossbars For Pole Vaulting, High Jumping

- Meet official specifications
- Last 3 years or longer
 Uniform all the way across
- No danger of splintering
- · Painted in black and white stripes
- Cost less per season

WEIGHT AND PRICE

14' (jumping) . 2.2 lbs. . . \$6.45 16' (vaulting) 2.6 lbs. 7.25

See your sporting goods dealer or write us for his name

K. & P. ATHLETIC CO. 1115 JEROME ST., MIDLAND, MICH.

and personal chats with them can clear up a lot of misconceptions.

The local library will invariably be happy to display a group of high school sports shots along with a collection of books possessing a definite sporting slant.

Some high school coaches ask every merchant on Main Street to display a group of sports photos for one full week each season. Every week during the year, in these towns, some merchant on the main drag will display a window-ful of high school sport snaps. Each week's display will consist of different photos in a different store or mercantile establishment. Fifty-two such displays draw considerable community attention.

You'll find that most merchants are alumni. But in any event they are apt to be cooperative, since such displays bring new customers to their places.

The local radio station, if one exists, is a gold mine for publicity purposes. Sportscasters will gladly arrange a sports quiz show for your athletes. All the members of a football, baseball or basketball squad may meet at the studio and try their hand at answering questions pertaining to their game.

VALUE OF INTERVIEWS

Interviews with high school celebrities are neither new nor newsworthy, but a debate between a girl and a boy baseball player over which sex makes the most desirable athlete is worthy of air time.

Recorded spots inviting listeners to attend a contest are infinitely more productive of results when the appeal is waxed by a member of the squad. Each player may record a short appeal to come to the game. Such appeals always receive the attention of the radio fan.

Speaking of unusual angles, there is the matter of nicknames. Every player in nearly every school sport possesses a nickname. Why not supply the local paper with material for a guessing contest in which a group of nicknames are listed with the reader identifying each player through his or her nickname alone? It's a sure-fire news stunt.

Very often the high school coach will prosper or fail in direct proportion to his public relations program. All suburban and county papers should be provided weekly with a column titled something like, "On the Coach's Bench." In this column, the coach may describe new sports, relate the origin of older ones, discuss new stars-write on anything and everything of a sporting nature.

an

oly

igh

2

efi-

ask

to

for

ery

ese

ain

of

k's

ent

wo ble

nts

ice

ers

X-

itv

lly

HIL

-10

ad

eir

al.-

le-

IS-

irl

er

ir-

ne.

ers

ely

he

he

a

le.

11-

re

ry

ort

p-q

ial

th

er

e?

ch

0-

tv

ly

ng

In

be

er

on

County weeklies will publish any item of this type under the coach's byline, as long as it doesn't cost them anything. A glossy photo may be furnished with each column. Publicity in an assortment of county weeklies builds up the gate for games played within driving distance.

This, in a nutshell, represents some of the methods which scholastic coaches may utilize to build up both their programs and their personal prestige.

After five years in the coaching game, Eugene A. Conklin of Denver, Colo., is now a free-lance writer.

"Here Below"

(Continued from page 5)

pitch with Hal making voluminous additions every step of the way. When this had been satisfactorily disposed of, we started chewing the fat on big league ball.

Hal is one of those rare birds who has a genuine horror for saying anythink nasty about anyone. During the course of the conversation, he put in solid plugs for Larry Doby ("he might develop into one of the truly great players in the game"). Bill Terry ("he'd back you up 100% long as he knew you were giving the club everything you had"), Billy Southworth ("a great manager"), Babe Young ("a power hitter who might come through for the Yankees this year"), Carl Hubbell ("one of the few pitchers who really could put the ball on a dime"), Freddy Fitzsimmons ("a great fielding pitcher"), and Mel Ott ("what a hitter!"), among others.

Since Hal had been something of a schoolboy wonder in his high school and college days, we asked him what had struck him most about his initial experience in facing big league hitters.

"Well," he said, "in schoolboy ball I had been used to striking out from 15 to 20 men a game. In the big leagues, however, I quickly discovered you couldn't breeze the ball by the hitters. You had to work on them more, use more stuff.

"Another thing You can't pick up this experience in the sandlots, on college diamonds, or even sitting on the bench in the big leagues. You have to work on it all the time against good hitters. In the one year the Giants farmed me out, I probably learned more about pitching than I had in all my previous years."



3 GYMS IN ONE

From Coast to Coast the HORN FOLDING BLEACHERS

AND HORN FOLDING PARTITIONS are making one
Gym do the job of three. With emphasis on careful
planning Horn offers a "tested" solution to gym
problems.

HORN FOLDING BLEACHERS-HORN FOLDING PARTITIONS

HORN, with years of experience and skill, offers to every school planner the services of the Horn Engineering Department. Horn installations are guaranteed.

FREE



Write for the HORN BOOK. Moderer SCHOOL PLANNING
A complete book with photographs, plans and specifications.

HORN BROTHERS CO.

A DIVISION OF HORN INDUSTRIES

FORT DODGE, IOWA



ESTABLISHED 1909

QUALITY ATHLETIC WEAR Only the finest NAME flannels, cottons, and satins go into POWERS Baseball and Softball Uniforms to make styles for champions. Buy POWERS for APPEARANCE, TAILORING, and WEAR. Write for new 1949 Spring and Summer Catalog. THE POWERS MANUFACTURING CO. WATERLOO, IOWA

Coaches' Corner

Please send all contributions to this column to Scholastic Coach, Coaches' Corner Dept., 7 East 12th St., New York 3, N. Y.

URING the informal war-time football years at Vanderbilt. Dick Bachman was one of the few Navy V-12 students who went out for the team. Though green, he was good enough to make second-string fullback. Before the 1945 game against powerhouse LSU, Coach Bartling addressed his Commodores thusly:

"Boys, all I ask of you is to be relaxed. We have everything to gain, nothing to loose. I want you to go out there with just one idea—to have FUN."

Bachman got into the game early in the second period and the first time he toted the ball three LSU tacklers hit him at the same time-three teethrattling jolts. He staggered to his feet and continued to try to dent the LSU line. But every time he got the ball, a couple of Tigers would smother him. They skinned his nose, cracked his back, and stepped on his neck.

Finally, Bachman turned to End Doug Malsberger: "Are you having fun up there in the line?"

"Well, sorta," Doug replied.
"Then let's swap positions," Dick proposed. "It's serious as hell back here.'

Dutch Leonard, the knuckle ball artist, was having trouble controlling his pet pitch and began to complain to Umpire Cal Hubbard. "Cal," he moaned, "I thought that last pitch got a piece of the plate."

Hubbard pondered a moment. "Well," he said, "it's been everywhere else in the park, so maybe it did.'

When Lefty Gomez was chucking them for the Yankees, he once lost an important game by serving up a slow ball in the ninth inning, which was bashed for a homer. Blazing mad, Manager Joe McCarthy caught Gomez in the locker room. "Why in the world did you throw a slow ball in that spot?" he snarled at the errant pitcher.

Softly and slowly, looking Marse Joe right in the eye, Gomez replied, "Because it was in my repertoire."

One day during scrimmage, Joe Chester, Roseville (Mich.) High School coach, became disgusted with his fullback's weak plunges at the line. In an effort to rouse the bruising 190-pound colored boy, he hollered for all to hear, "Bob, you look yellow. Let Jim take over." As Bob went toward the

sidelines with a thoughtful look on his face, Chester heard him remark to one of his teammates:

"You know, I think Coach must be getting color blind."

After lauding ourself for having introduced the Double Quarterback T in our columns way back in 1946, Harry O'Mealy of Nogales (Ariz.) Migh, told us last month that he had used the formation as far back as 1943. And now comes this note from Paul J. Gildersleeve, of Marysville, Cal.:

"In my 1941 year at Marysville Union High, we used the Double T or, as we called it, the V Formation, under the coaching of Glen Potter. He designed the formation and it proved very successful. Later I used it while coaching a neighborhood eleven. So, as far as I'm concerned, this play is at least seven years old."

"Not to take credit away from Mr. Gardner in his article, 'Football Sees the Light,' in the January issue, but I believe that the first high school night game was not that played by New Castle (Pa.) High in 1929 but the one played between Westville Township (Ill.) High and Milford (Ill.) High on September 21, 1928." So writes Sam A. Chicas, athletic director at Westville.

"A regulation ball painted with white enamel afforded a thrilling game, and several fumbles played a vital role in the outcome. The game was won by Westville, 26-6. The ball is still on display in our trophy case and we will cherish it until some other school can prove we were not the first to play a night game."

Sam Hammerstrom, football coach at Jamestown (N.Y.) High, puts in a plug for his crack wingback, Lennart Klingberg. "His performance last year was particularly outstanding," writes Sam, "especially in view of the fact that he played in only 6 games and was a member of a team that could do no better than win half of its games.

"Lennart carried the ball 37 times for a total of 689 yards, or a season average of 18.6 yards per try. His best day was against Olean High. Olean racked up 19 points before Jamestown could get started. Then Lennart went to work. He carried the ball only 8 times but he gained 215 yards (an average of 27 yards per carry), and Jamestown won, 34-19.

"Klingberg scored 13 touchdowns in 6 games and passed for 2 more."

Since basketball players can now move to the sidelines during timeouts, the traditional little four-wheeled cart containing towels, lemons, resin, etc., is rather passe. But not at Boswell (Ind.) High. Coach M. Dale Baughman has remodeled the device and put it into service again in a somewhat different manner.

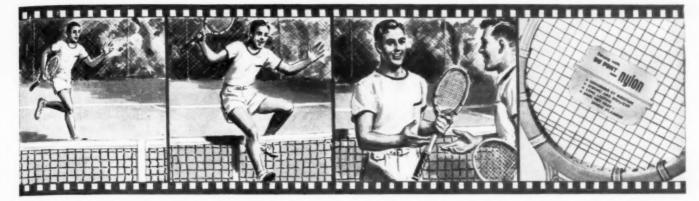
He has added two 34-in, uprights (about waist high) to either end of the cart with the upper extremities connected by cross-pieces. This permits the players' individual towels to be draped across the top, instead of wadded, and enables each man to readily find his towel since all of them are marked. At time-outs and quarters, the student manager simply rolls the remodeled cart to the edge of the court where the players may reach for their towels or partake of the resin, lemons, and minor first-aid equipment in the lower bin.

The Times didn't march on one day last month. It tripped up pretty badly. We refer to the illustrious New York



"What can we do? He passed all the exams!"

NO OTHER TENNIS STRING OFFERS



THE COMBINED ADVANTAGES OF NYLON

ear tes act and uld its nes son est ean wn ent y 8 (an and wns

low

meeelons. t at

ale vice n a

hts

of

ties

ers to

to

nem

ıarolls

the ach the -aid

day dly. ork

rogram

ACH

Resists moisture • Does not fray • Strong and resilient •

Lasts longer

DU PONT NYLON

Tennis, Squash and Badminton Strings



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Your pupils will get better all-round performance from a racket strung with Du Pont nylon. Forehand, backhand or serve . . . they'll like it. What's more, it's durable and longwearing-stands up against . . . moisture . . . rugged treatment . . . steady use.

Try nylon yourself. You'll see why more and more instructors and students alike are switching to nylon for keeps. Look for the nylon tag. E. I. du Pont de Nemours & Co. (Inc.), Plastics Dept., Room 513, Arlington, N J.



THE HANNA MANUFACTURING COMPANY — Athens, Georgia

59

newspaper of that name. Commenting on the St. Louis-Notre Dame basketball game, sports editor Arthur Daley wrote:

"St. Louis was leading Notre Dame, 42 to 40, with some 20 seconds to go when Moose Krause sent in a substitute who forgot to report to the scorer—a technical foul. Krause grabbed (Coach) Hickey by the lapels. 'Ed,' he screamed, 'I'm being robbed.' 'Don't worry,' said Hickey, 'We'll waive the foul.' St. Louis did. St. Louis won. . . ."

That's where we stopped reading the piece. How could Hickey have waived the technical foul when the rule book states that such fouls cannot be waived? Or do you boys out in the Mid-West use a friendlier rule book?

Our good friend, Clair Bee, long may he wave over L.I.U., also pulled something of a skull last month—on a television sportscast, no less. With three seconds remaining and City College two points ahead, Oklahoma had the ball out of bounds. Clair shook his head sadly and reported, "The ball game is over, folks, there is no time for a play." No, no, Clair, that's a technical on you. The clock does not start until the ball touches or is touched by someone on the court.

Having heard that W. Harold O'-Connor, ace track coach at Concord (Mass.) High and a Scholastic Coach contributor of superlative standing, has been influential in giving Johnny Kelly, our national marathon champ, a new lease on life, we wrote to O'Connor asking for the details—and here they are:

"Johnny approached me about the time he began serious preparation for making the Olympic team. He was quite concerned about the way such men as Vogal, Crane, and other college runners were leaving him in the early stages of his races, making it difficult for him to catch them later.

"Upon checking his mile time, I found that it was rather poor. So we worked hard on my track changing his stride and style quite a bit. As a result, he cut his mile time to about 4:45. To make sure he got plenty of speed work, Johnny entered many of the shorter handicap races. He concentrated on winning the time prizes whenever possible. I made no attempt to regulate Johnny's marathon pace beyond the first couple of miles, since he is a master of that phase.

ha

st

st

sh

W

co

fu

ice

co

ha

bo

the

goo

dog

hir

ove

rui

Ic

no

sec

tak

wh

str

five

bre

nei

he is a master of that phase.

"Although over 40, John began to cause trouble for the faster college men because they were unable to leave him early in the race. He won from fellows like Vogal and Crane and attracted the attention of the visiting Finns who noticed his improvement and voiced approval. When he defeated Crane and the others in the Boston Marathon last year, he was kind enough to say that the work he had done with me had proved very helpful.

helpful.

"Upon his return from the Olympics, he contacted me and continued his speed work. Both of us were overjoyed when he won the National Championships for the first time in his life, especially since he turned the tables on Gerald Cote, 1948 Boston Marathon winner.

"Johnny's comeback may be attributed to his amazing courage rather than to any miracles of coaching. He loves distance running of all types and is always encouraging boys in this area to take up track. Johnny and Ted Vogal and I have had some grand discussions about the techniques of distance running, and I have always gone away feeling that I gained most from the talks. Any American boy can do himself a service by employing them as models for his life."

During a basketball game between East Mountain High, Gilmer, Tex., and Leverett's Chapel, reports Coach E. J. Woodruff of East Mountain, an E.M.H.S. boy ran all the way down the court to the wrong goal and, while all the players stopped and watched, took a shot and missed. The next day at school one of his classmates asked him why he had missed the shot.

"I guess it was the coaching I had," the boy replied.

"Having taken many of your anecdotes around the chicken and chowder circuit," writes J. J. Tansey of Wentworth Institute, Boston, "I feel obligated to pass this story along. This incident actually took place. The occasion was the presentation of the class play. My football captain was about to deliver an address of welcome when he suddenly noticed two strays in the balcony—his father and a friend, one Tony Parrone.

"The boy started, 'As chairman of the committee I extend to each of you a hearty welcome coupled with my sincerest wish that this our first performance will interest you.' That was as far as he could get. The next word, 'Done' was repeated at least four times and was followed by an embarrassing silence. Suddenly out of the balcony came Tony's ringing advice:

"'Better catch up on thata word keed, because the old man is a-cooked to a turn!"



Next time he'll ask for Armour Strings!

They last so long—are extra lively, extra strong—because Armour makes them by an exclusive 6-step process... from the world's largest supply of raw materials.

Armour and Company, Chicago 9, Illinois

Distance Running

(Continued from page 13)

g

of

of

n-

pt

ce

ce

to

ge to

on ne

is-

6-

he

as he

ry

m ed er-

nal

in

he ton ib-

ner

He

Ced

and of

ays

ost

can ing

een

ex.

ach

an the

all

ook

at

ked

ad,"

necow-

of

feel

This

oc-

the

was

wel-

two

and

n of

you

my

per-

was

ord,

four

barthe

vice:

word

oked

and college athletes. These movies have a stimulating influence on the students and also enable them to study the components of championship form.

All important to the potential as well as the promising distance runner, is that he must never become discouraged. He must be impressed with the fact that he is improving all the time.

Confidence is a great factor in the distance runs. A runner who is discouraged or who is in awe of his opponent, enters the race halflicked. The following story beautifully illustrates the point.

When I was participating in service meets, I trained wherever I could find a track. Once I was granted permission to use a high school track and worked out with two milers from that school.

RICHARD LANE BERNSTEIN, now a professional writer, ran the distances for Los Angeles City College in the early '40s and was captain of the 1941 cross-country team which won the Southern Pacific AAU crown. After graduation, he ran for the Southern California A.A., then entered the service, where he won 2nd place in the 1943 All-Service 880.

One of them was faster and smoother than the other, and should have been able to beat him easily. I discovered, however, that the faster boy had lost to the other repeatedly in previous meets. Upon talking to the boy, I discovered that in his mind he did not believe he was as good a miler as his teammate and, hence, in the meets, was content to dog along behind him.

In the following days, I showed him that he was mistaken and pointed out factors that he had overlooked. I told him how important the will to win is and how a runner can amaze himself by just saying to himself, "I'm in shape and I can beat these guys."

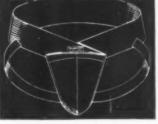
The young miler in question took notice of this fact. In one of the subsequent races, he forced himself to take the lead and, to his surprise, when his teammate challenged him in the stretch, he mustered enough strength to beat him to the tape by five yards.

Regular exercises consisting of pushups, running in place, and deep breathing routines are good for run-



Apex No. 3

The same patented* features as Apex No. 1 with a soft flannel pouch designed to hold a protective cup.



Every day more people ask for the "V" front Olympic Champion Apex supporter. That "V" absorbs all body twists and turns-forever erases displacement and chafing as the unnecessary evils of old style supporters.

The Olympic Champion Apex supporters provide constant support and comfort no matter what the sport. Look for the name Olympic Champion-it's the original and only patented V-type supporter. Next time you order supporters, say Olympic Champion and expect the best.

*The Olympic Champion Apex basic construction is protected by U. S. Pat. 2,301,066—no licenses have been granted any other manufacturer.

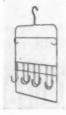




LOCKER BASKETS Woven and welded check-ing baskets.

UNIFORM HANGERS

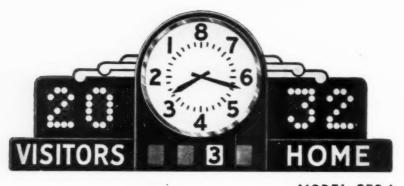




Available in sizes to meet your locker room needs. Write for descriptive lit-

AMERICAN WIRE FORM CO.

267-273 Grant Ave., Jersey City, New Jersey



MODEL 250-I BASKETBALL TIMER AND SCOREBOARD

ELECTRIC SCOREBOARDS

Football

Basketball

Baseball

For Championship Performance and Low Cost, Look to the

M. D. BROWN COMPANY

Our new models are a revelation in accuracy and design We manufacture all types of standard and custom built scoring equipment

Write for our illustrated literature and price list

Start Your Season Like a Champion

M. D. BROWN COMPANY

LAKE STREET

NILES, MICHIGAN



"Listen to" spalling surfaces, leaks, cracks and other signs of deterioration. Take them in time; safeguard your stadium against weather and wear for years to come. Plastic Rock is the enduring answer. It adheres permanently to concrete, wood and steel; wears like iron; is slip-proof

wet or dry. preventing accidents. Packed complete in barrels, Plastic Rock involves no "trick" formula. It excels, too, for floors of corridors, ramps, locker and wash rooms. A com-prehensive report, eliminating guesswork, to keep or put your stadium "in condition," is yours for the asking. Also,

WRITE ON YOUR LETTERHEAD FOR REPORT 220-C-3

UNITED LABORATORIES, Inc.

CLEVELAND 12, OHIO



Health Examinations

(Continued from page 32)

tice is for the Board to appropriate money for such examinations.

While a number of the smaller schools have for years expected interested physicians to make such group examinations either free or for fees ranging from 25¢ to \$2 per pupil. the "workman is worthy of his hire" and should be paid adequately.

This can be on a per pupil basis or a flat hourly fee. But for the protection of all concerned, agreement should be reached beforehand concerning the scope of the examinations so that sufficient time will be allotted

every pupil.

Sometimes the Athletic Association is able to secure comprehensive examinations and medical care for the athletes for a yearly or seasonal fee, when such arrangements can be made with a local physician or a county medical unit. In other cases, an interested physician, usually one of the younger men, may volunteer his services as "team physician" because of his interest in athletics and the "varsity."

Since such plans usually involve relatively small groups, it is likely that arrangements of this nature can be made in communities where the authorities feel it is the best proce-

dure.

Definite advances have been made in the adequacy of health examinations, and in the number of children of school age who are given them every year. However, as late as 1941, United States Commissioner of Education, Dr. John W. Studebaker 10 reported that "one-half of our school children have never had a thorough physical examination (and), onethird...have never been examined by a physician..

DA

DE

TH

STA

LOI

JAY

D

If the goal of the school is to provide each child with the best possible education suited to his needs and capacities, then every effort must be made to learn everything possible about his mental and physical condition. Both the hazards to the child and the legal liability to the school, make adequate examinations followed by an effective follow-up program, a

first essential.

¹C. E. Turner, School Health and Health Education. St. Louis, Mo., C. V. Mosby Company, 1947, p. 21.

²White House Conference on Child Health and Protection, Official Proceedings. Supplement to the United States Daily, November 28, 1930, p. 3.

³H. A. Rusk, and E. J. Taylor, "Physical Disability, A National Problem," American Journal of Public Health, 38:10 (October 1948), p. 1383.

1383.

From "The Nation's Health," as quoted in Youth Leaders, 9:2 (November 1948), p. 47.

J. W. Wilce, "Health of the High School Athlete." Athletic Journal, 22:3 (November 1941), p. 22.

W. W. Patty, and P. J. Van Horn, "Health of High School Athletes." Journal of Health and Physical Education, 6:9 (December 1935), p. 26-7.

and Physical Education, 6.5 (25cd)
p. 26-7.
'G. R. McCormack, "Safeguarding the Athlete's Health. Hygeia, 11:10 (October 1933),
p. 906.

*Elizabeth Cotton, "Protecting the Health the Child." Hygeia, 17:5 (May 1939), p. 431.

"C. E. Turner, Op. cit., p. 210-211.

10J. W. Studebaker, (as reported in) Compressional Record of February 17, 1941.

EDITORIAL ADVISORY BOARD

NATIONAL FEDERATION

R. E. RAWLINS, President

IS

priate

naller

d in-

such

or for

pupil,

hire'

sis or

rotec-

ement

conations lotted

iation

re exor the

al fee. made county inter-

of the

is ser-

use of "var-

nvolve

likely

re can

re the proce-

made

amina-

hildren

them

s 1941,

f Edu-

er10 re-

school

orough

to pro-

oossible

and ca-

nust be

possible

condi-

e child

school

ollowed

gram, a

d Health

d Health

Supple-lovember

sical Dis-

can Jour-1948), p.

quoted in

), p. 47. th School November

of Health ber 1935),

the Ath-per 1933),

Health d

in) Com-

one-

H. V. PORTER, Secretary-Treasurer

HIGH SCHOOL

- V. S. BLANCHARD, President AMERICAN ASSN. for HEALTH, PHYS. ED. and RECREATION
- PAUL KELLY, Athletic Director RILEY H. S., SOUTH BEND, IND.
- L. L. McLUCAS, Supervisor HEALTH and PHYS. ED., DUVAL COUNTY, FLA.
- V. L. MORRISON, Athletic Director TECHNICAL H. S., ST. CLOUD, MINN.
- F. S. O'CONNOR, Athletic Director BOONE (IOWA) H. S.
- FLOYD A. ROWE, Directing Supervisor PHYSICAL WELFARE, CLEVELAND **PUBLIC SCHOOLS**
- **DAVID P. SNYDER, Director** PHYS. ED., OAKLAND PUBLIC SCHOOLS, CAL.
- CHALMER WOODARD, Coach LIBERTY H. S., LAWRENCE, KANS.

AMATEUR ATHLETIC UNION

DANIEL J. FERRIS, Secretary-Treasurer

COLLEGE

ETHAN ALLEN, Baseball Coach YALE UNIVERSITY

- O. B. COWLES, Basketball Coach UNIVERSITY OF MINNESOTA
- DEAN CROMWELL, Track Coach UNIVERSITY OF SO. CALIFORNIA
- THOMAS K. CURETON, Professor PHYS. ED., UNIV. of ILLINOIS
- STANDARD LAMBERT, Ath. Director LAMAR COLLEGE (TEX.)
- LOU LITTLE, Football Coach COLUMBIA UNIVERSITY
- JAY B. NASH, Chairman DEPT. of PHYS. ED. and HEALTH, NEW YORK UNIVERSITY

Only 6 Dozen at This Price!
WILSON #CJO LIST PRICE \$26,10 ea WILSON #CJO

OFFICIAL LACELESS BASKETBALLS
Factory "Seconds"—Soiled
\$9 Each, plus postage. Cash or Che
These balls have been repaired and new bladders
installed at Wilson factory and stamped "seconds."

E. J. CLARKE
P. O. Box 881, West Palm Beach, Fig.

Electric Basketball Scoreboards

Immediate Delivery Now Only \$132.50 less Cable— No Moving Parts—Guaranteed In Use All over U. S. Write for free Information

CEDAR KRAFT COMPANY Grand Haven, Michigan

H. & R. DRY MARKERS THREE MODELS Force Feed — Quick Shut-off — Large Capacity · Easy to fill and operate · No Brushes or Screens ACCLAIMED AT THE N.C.A.A. AT SAN FRANCISCO, CALIF.

H. & R. MFG. CO., LOS ANGELES 34, CALIF.

JAN. 7-8, '49



- Mat Felt
- AMERICAN WIRE (61)
- ☐ Folder on Locker Baskets and Uniform Hanger
- ARMOUR & CO. (60)
- ☐ Information on Extra Lively, Extra Strong Tennis Net Strings
- ATLAS ATH. EQUIP. (53)
- Catalog on Baseball, Football, Basketball, Box-ing, Gym and Field Equipment
- BEACON FALLS (15)
- ☐ Information on Athletic Footwear
- M. D. BROWN (62)
- Literature and Price List on Electric Timers and Scoreboards for Basketball, Football, Baseball
- **BUTWIN SPORTSWEAR (49)**
- ☐ Information on Sports
 Jackets, Sideline Parkas, Basketball Warm-Up Suits

- ☐ Information on Electric Scoreboards
- **CHEM PRODUCTS (40)**
- ☐ Sample Tube "Cinch" for Superior Gripping
- E. J. CLARKE (63)
- Catalog and Price List on Repair of Inflated Goods
- JOHN T. CORE (54)

 Information on Five-Star Track Scorecards
- C. R. DANIELS (4)
- Catalog on New Line of Football, Baseball, Softball, Gym and Field Equipment
- **DUNLOP TIRE (44)**
- ☐ Booklet, "How to Improve Your Tennis Game," by Vinnie Richards How many ...
- EAGLE METALART (61)
- Catalog of Trophies, Medals, Emblems, Banners
- ENCYCLOPAEDIA
- **BRITANNICA (46)**
- ☐ List of Technical Sports

Samples and Prices on Coaches' Slacks

GENERAL SPORTCRAFT (2)

Rules Booklets for Badminton, Deck Tennis, Shuffleboard, Table **Tennis, Bat Tennis**

GILLIS SHOE CORP. (48)

- ☐ Information on Baseball and other Sport Shoes
- H. & R. MFG. (63)
- ☐ Information on Dry Markers
- HAND KNIT HOSIERY (32)
- ☐ Information on Shrink-Treated Athletic Socks
- HANNA MFG. (59)
- Catalog on Baseball and Softball Bats

HILLERICH & BRADSBY (33)

- ☐ Famous Sluggers Year-
- ☐ Softball Rules

HILLYARD SALES (55)

- ☐ Booklet, "Floor Treatment and Maintenance"
- ☐ Basketball Chart and Scorebook

HODGMAN RUBBER (50)

Catalog on Reducing Shirts, Warmup Jackets, Hooded Capes, Sideline

SEE PAGE 64 FOR OTHER LISTINGS AND FORM FOR SIGNATURE

JAVELIN AND DISCUS SPOT MARKERS

Made with 8" \times 1/4" iron post with a cold rolled steel flag $2^{1}/2$ " \times 4". The white numerals are $1^{1}/2$ " high on a black enamel background. A 3%" semi-circular rack holds the markers.

20 markers with rack 25 markers with rack 30 markers with rack

\$5.80 delivered \$7.05 delivered \$8.30 delivered

TAYLOR MFG. CO.

P. O. BOX 612

SALINA, KANSAS

GYMNASIUM and PLAYGROUND APPARATUS.

ELECTRICAL BASKETBALL and FOOTBALL SCOREBOARDS.

REPLACEMENT PARTS FOR NARRAGANSETT GYM EQUIPMENT

BRADLEY M. LAYBURN CO.

461-8th Avenue, New York, N. Y.

MASTER COUPON

on which advertisement may be found

NADEN & SONS (35) Catalog on Electric Scoreboards and Timers

JOHN T. RIDDELL (37)

(See page 63 for other listings)

(Numbers in parentheses denote page

☐ Information on Suspension Helmets, Shoes, Balls, Track Supplies

JOHNSON & JOHNSON (41)

HORN BROS. (57)

Plans"

☐ Information on V-Front Supporters

■ Booklet, "Modern School

K. & P. ATH. CO. (56)

☐ Information on Dow-Metal Cross-Bars

BRADLEY & LAYBURN (64)

Information on Gym and Playground Apparatus, Portable Bleachers, Electric Scoreboards

LINEN THREAD

(Inside Front Cover) Full information on

Tennis Nets
Goal Nets Protection Nets Gym Dividing Nets

Baseball Batting Cage Nets

MARBA, INC. (36)

☐ Information on Athletic **Equipment Reconditioning**

FRED MEDART (27)

Book, "Physical Training, Practical Suggestions for the Instructor

☐ Catalog on Telescopic Gym Seats, Steel Lockers

☐ Information, Acromat-Trampolin

Catalog on Basketball Backstops, Scoreboards

McLAUGHLIN-MILLARD

(Inside Back Cover)

Catalog on Adirondack Baseball Bats

MILLER CO. (48)

☐ Information on Starting Block

MUTUAL LIFE (30)

☐ Booklet

NAME.

NATIONAL SPORTS (54) Catalogs: Bases, Mats, Rings, Training Bags,

Wall Pads, Pad Covers

NISSEN TRAMPOLINE (52)

☐ Literature

☐ Booklet, "Tips on Trampolining"

O-C MFG. (61)

☐ Information on V-Front Apex Supporters

OCEAN POOL (52)

Information on Trunks, Swim Fins, Kicka Boards, Nose Clips, Caps, Klogs

O'SHEA KNITTING (43)

Catalog on Uniforms

PENNSYLVANIA RUBBER (29)

Catalog on Championship Softballs and Tennis Balls

POWERS MFG (57)

Spring and Summer Catalog on Baseball and Softball Uniforms

QUALITEX MFG. (56)

☐ Information on Cushion Sole, Nylon Socks

RAWLINGS MFG. (3)

☐ Catalog

REMINGTON ARMS (47)

Instructor's Manual on Operation of a Rifle Club

REVERE ELECTRIC (25)

Sports Floodlighting Bulletin

Catalog

SEAMLESS RUBBER (51)

☐ Information on Sav-A Leg Home Plate, Athletic Tape, Kontleek Bladders ☐ Information on New Line

of Athletic Balls ■ Booklet on Pro-Cap Athletic Tape

SKINNER & SONS (39)

☐ Information on Skinner **Fabrics**

SOUTHWEST MFG. (55)

☐ Catalog on Arkansas Traveler and Texas Leaguer Bats

SPALDING & BROS. (1)

□ Catalog

Sports Show Book (See Feb. adv. for free rental of "The Double Play Kings of Baseball")

TAYLOR MFG. (64)

☐ Information on Javelin and Discus Spot Markers, Basketball Bags, and **Wrestling Mat Covers**

UNITED LABS. (62)

Bulletin on Stadium Repair

VOIT RUBBER (17-23)

Catalog on Rubber Covered Balls and Equipment ☐ Information on New Batting Tees

☐ Illustrated Price List

WILLIAMS IRON (49)

Grandstand Catalog

WILSON SPORTING (6)

☐ Catalog

POSITION

(Principal, coach, athletic director, physical director)

-ENROLLMENT SCHOOL-

No coupon honored unless position is stated

CITY.

March, 1949

ADVERTISERS INDEX

	-
ALL AMERICAN TROPHIES	18
AMERICAN HAIR & FELT COMPANY	53
AMERICAN WIRE FORM COMPANY	771
ARMOUR & COMPANY	
ATLAS ATHLETIC EQUIPMENT COMPANY	
BEACON FALLS RUBBER COMPANY	
	- 74
BROWN, M. D., COMPANY	
BUTWIN SPORTSWEAR COMPANY	49
CASTELLO FENCING EQUIPMENT COMPANY	7 22
CEDAR KRAFT COMPANY	63
CHEM PRODUCTS, INC.	-
CLARKE, E. J.	- 1
CORE, JOHN T.	
DANIELS, C. R., INC.	- 1
DENVER CHEMICAL COMPANY	. 56
DOLGE, C. B., COMPANY	26
DUNLOP TIRE & RUBBER CORPORATION	44
DU PONT DE NEMOURS, E. I., & CO., INC.	59
EAGLE METALART COMPANY	
ENCYCLOPAEDIA BRITANNICA FILMS, INC.	
FOX, JOHN J.	
GENERAL SPORTCRAFT, LTD.	
GILBERT & COMPANY	54
GILLIS, GEORGE, SHOE CORPORATION	48
H. & R. MANUFACTURING COMPANY	
HAND KNIT HOSIERY COMPANY	
HANNA MANUFACTURING COMPANY	
HILLERICH & BRADSBY COMPANY	33
HILLYARD SALES COMPANIES	55
HODGMAN RUBBER COMPANY	50
HORN BROTHERS COMPANY	. 57
IVORY SYSTEM 4th C	
JOHNSON & JOHNSON	41
K. & P. ATHLETIC COMPANY, THE	
LAYBURN, BRADLEY M., COMPANY	
LINEN THREAD COMPANY 2nd C	AVAL
FINELY THREND COMMING	
MacGREGOR-GOLDSMITH, INC.	31
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. 3rd C	31
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. 3rd C	31 over
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. 3rd C MARBA, INC.	31 over 36
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC.	31 Cover 36 27
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE	31 cover 36 27 48
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y.	31 cover 36 27 48
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD	31 Cover 36 27 48 30
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY	31 36 27 48 30
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY	31 36 27 48 30
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY	31 Cover 36 27 48 30 35 54
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE	31 Cover 36 27 48 30 35 54 52
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY	31 Cover 36 27 48 30 35 54 52 61
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY OCEAN POOL SUPPLY COMPANY	31 36 27 48 30 35 54 52 61 52
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS	31 36 27 48 30 35 54 52 61 52 43
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY OCEAN POOL SUPPLY COMPANY O'SHEA KNITTING MILLS PENNSYLVANIA RUBBER COMPANY	31 36 27 48 30 35 54 52 61 52 43 29
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS	31 36 27 48 30 35 54 52 61 52 43 29
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL. INC.	31 36 27 48 30 35 54 52 61 52 43 29 57
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL. INC.	31 36 27 48 30 35 54 52 61 52 43 29 57
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY RAWLINGS MANUFACTURING COMPANY	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56 3
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY RAWLINGS MANUFACTURING COMPANY REMINGTON ARMS COMPANY	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56 3
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REMINGTON ARMS COMPANY REVERE ELECTRIC COMPANY	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56 3 3 47 25
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REMINGTON ARMS COMPANY REVERE ELECTRIC COMPANY	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56 3 3 47 25
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REMINGTON ARMS COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC.	31 36 27 48 30 35 54 52 61 52 43 29 57 44 56 3 47 25
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY	31 36 27 48 30 35 54 52 43 29 57 44 56 3 47 25 37 51
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS	31 Cover 36 27 48 30 35 54 52 61 52 43 3 29 57 44 56 3 3 47 25 37 51 39
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY	31 30 27 48 30 33 54 52 61 52 43 29 57 44 56 3 47 25 37 51 39 55
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS.	31 Cover 36 27 48 30 35 54 52 61 52 43 37 47 25 37 51 39 55 1
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE. O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS.	31 Cover 36 27 48 30 35 54 52 61 52 43 37 47 25 37 51 39 55 1
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER	31
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY	31
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC.	31
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC. VOIT, W. J., RUBBER CORPORATION	31 Cover 36 27 48 30 35 54 52 61 52 43 37 57 44 52 55 51 37 55 54 64 62
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC.	31 Cover 36 27 48 30 35 54 52 61 52 43 37 57 44 52 55 51 37 55 54 64 62
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC. VOIT, W. J., RUBBER CORPORATION 17, 19, 2	31 Cover 36 37 38 30 35 54 52 43 30 57 44 56 37 37 51 37 55 64 62 21, 23
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC. VOIT, W. J., RUBBER CORPORATION 17, 19, 2 WELLS PUBLISHING COMPANY	31 Cover 36 27 48 30 35 54 52 61 52 43 37 57 44 55 63 37 55 51 37 55 64 62 21, 23 48
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC. VOIT, W. J., RUBBER CORPORATION 17, 19, 2 WELLS PUBLISHING COMPANY WILLIAMS IRON WORKS	31 Cover 36 27 48 30 35 54 52 61 52 43 37 57 44 56 37 55 51 45 64 62 21, 23 48 49
MacGREGOR-GOLDSMITH, INC. McLAUGHLIN-MILLARD, INC. MARBA, INC. MEDART, FRED, PRODUCTS, INC. MILLER COMPANY, THE MUTUAL LIFE INSURANCE CO. OF N. Y. NADEN & SONS ELECTRIC SCOREBOARD COMPANY NATIONAL SPORTS EQUIPMENT COMPANY NISSEN TRAMPOLINE, THE O-C MANUFACTURING COMPANY O'SHEA KNITTING MILLS. PENNSYLVANIA RUBBER COMPANY POWERS MANUFACTURING COMPANY PRENTICE HALL, INC. QUALITEX MANUFACTURING COMPANY REWLINGS MANUFACTURING COMPANY REVERE ELECTRIC COMPANY REVERE ELECTRIC COMPANY RIDDELL, JOHN T., INC. SEAMLESS RUBBER COMPANY SKINNER, WILLIAM, & SONS SOUTHWEST MANUFACTURING COMPANY SPALDING, A. G., & BROS. SPORTING GOODS DEALER TAYLOR MANUFACTURING COMPANY UNITED LABORATORIES, INC. VOIT, W. J., RUBBER CORPORATION 17, 19, 2 WELLS PUBLISHING COMPANY	31 Cover 36 27 48 30 35 54 52 61 52 43 37 57 44 56 37 55 51 45 64 62 21, 23 48 49